Access DB# 107041

142

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: PENG KE Examiner #: 79511 Date: 10/28/03
Art Unit: 2174 Phone Number 30 5 7615 Serial Number: 09532412
Mail Box and Bldg/Room Location: 4C30 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Melded user interface

Inventors (please provide full names): Jonathan Hull Peter Hart

Earliest Priority Filing Date: 3/22/2000

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

An application that extract display data regarding first application - interface from the video card buffer. Then it recognited the layout pattern. Then use the layout to display the data generated by a seaond application.

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: Geoffrey St Leger	NA Sequence (#)	STN
Searcher Phone #: 308-7800	AA Sequence (#)	Dialog ✓
Searcher Location: 4B30	Structure (#)	Questel/Orbit
Date Searcher Picked Up: 10/31/3	Bibliographic ✓	Dr.Link
Date Completed: 11/5/3	Litigation	Lexis/Nexis
Searcher Prep & Review Time: 60	Fulltext ✓	Sequence Systems
Clerical Prep Time:	Patent Family	WWW/Internet
Online Time: 240	Other	Other (specify)

PTO-1590 (8-01)

USPTO

STIC Search Report
EIC 2100

STIC Database Tracking Number: 107041

TO:	From:
Peng (Simon) Ke **Location:** **Art Unit : 2174** **Wednesday, November 05, 2003** **Case Serial Number: 09532412**	**Geoffrey St. Leger** **Location: EIC 2100** **PK2-4B30** **Phone: 308-7800** **geoffrey.stleger@uspto.gov**

Search Notes

Dear Examiner Ke,

Attached please find the results of your search request for application 09532412. I searched Dialog's foreign patent files, technical databases, product announcement files and general files.

Please let me know if you have any questions.

Regards,

Geoffrey St. Leger
4B30/308-7800

sira
Search and Information Resources Administration

STIC Search Results Feedback Form

EIC 2100

Questions about the scope or the results of the search? Contact ***the EIC searcher or contact*:**

Anne Hendrickson, EIC 2100 Team Leader
308-7831, CPK2-4B40

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 3730*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found**:*
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC2100 CPK2-4B40

Search and Information Resources Administration

File 347:JAPIO Oct 1976-2003/Jun(Updated 031006)
(c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200371
(c) 2003 Thomson Derwent
File 348:EUROPEAN PATENTS 1978-2003/Oct W04
(c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20031030,UT=20031023
(c) 2003 WIPO/Univentio

Set	Items	Description
S1	410	AU=(HULL J? OR HART P?)
S2	35606	(VIDEO OR GRAPHICS OR DISPLAY OR VGA OR SVGA OR 3D)(1W)(CARD? ? OR BOARD? ? OR CONTROLLER? ? OR ADAPTER? ? OR ACCELERATOR? ?)
S3	0	S1 AND S2

File 8:Ei Compendex(R) 1970-2003/Oct W4
(c) 2003 Elsevier Eng. Info. Inc.
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(c)2001 ProQuest Info&Learning
File 483:Newspaper Abs Daily 1986-2003/Nov 04
(c) 2003 ProQuest Info&Learning
File 6:NTIS 1964-2003/Nov W1
(c) 2003 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2003/Oct W4
(c) 2003 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 1998 Inst for Sci Info
File 34:SciSearch(R) Cited Ref Sci 1990-2003/Oct W4
(c) 2003 Inst for Sci Info
File 99:Wilson Appl. Sci & Tech Abs 1983-2003/Sep
(c) 2003 The HW Wilson Co.
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
(c) 2002 The Gale Group
File 266:FEDRIP 2003/Sep
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File 95:TEME-Technology & Management 1989-2003/Oct W3
(c) 2003 FIZ TECHNIK
File 438:Library Lit. & Info. Science 1984-2003/Sep
(c) 2003 The HW Wilson Co

Set	Items	Description
S1	17113	(VIDEO OR GRAPHICS OR DISPLAY OR VGA OR SVGA OR 3D)(1W)(CARD? ? OR BOARD? ? OR CONTROLLER? ? OR ADAPTER? ? OR ACCELERATOR? ?)
S2	4024	AU=(HULL J? OR HULL, J? OR HART P? OR HART, P?)
S3	0	S1 AND S2

File 347:JAPIO Oct 1976-2005/Jan(Updated 031006)
(c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200369
(c) 2003 Thomson Derwent

Set	Items	Description
S1	22456	(VIDEO OR GRAPHICS OR DISPLAY OR VGA OR SVGA OR 3D)(1W)(CARD? ? OR BOARD? ? OR CONTROLLER? ? OR ADAPTER? ? OR ACCELERATOR? ?)
S2	5138	S1(5N)(BUFFER? ? OR MEMORY OR MEMORIES OR RAM) OR DISPLAY(-)BUFFER? ? OR FRAME()BUFFER? ? OR FRAMEBUFFER? ?
S3	2726950	INTERFACE? ? OR PANE? ? OR GUI? ? OR LAYOUT? ? OR SCREEN? ? OR MENU? ? OR TOOLBAR? ? OR TOOL()BAR? ? OR DISPLAY? OR VIEW???
S4	42090	S3(5N)(APPLICATION? ? OR PROGRAM? ? OR SOFTWARE)
S5	46733	(DIFFERENT OR SEPARATE OR ANOTHER OR OTHER OR MULTIPLE OR MULTIPLICITY OR PLURAL OR DUAL? OR SECOND OR 2ND OR TWO OR VARIOUS OR ASSORT? OR SEVERAL OR INDEPENDENT)(5W)(APPLICATION? ? OR PROGRAM? ? OR SOFTWARE)
S6	204	S2 AND S4
S7	32	S6 AND S5

7/5/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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07037929 **Image available**
COMPLEX USER INTERFACE METHOD, COMPUTER SYSTEM AND COMPUTER READABLE RECORDING MEDIUM

PUB. NO.: 2001-265563 [JP 2001265563 A]
PUBLISHED: September 28, 2001 (20010928)
INVENTOR(s): JONATHAN J HAL
HART PETER E
APPLICANT(s): RICOH CO LTD
APPL. NO.: 2000-380411 [JP 2000380411]
FILED: December 14, 2000 (20001214)
PRIORITY: 00 532412 [US 2000532412], US (United States of America), March 22, 2000 (20000322)
INTL CLASS: G06F-003/14; G06F-003/00

ABSTRACT

PROBLEM TO BE SOLVED: To provide a method to couple user **interfaces** of some **applications** .

SOLUTION: Data generated by a first **application** is extracted from a **display buffer** . The data is related to the user **interface** from the first **application** . A **layout** pattern is recognized from the extracted data. Complex display is created by using layout. The complex display is used to display a second piece of data generated by a **second application** . No direct link exists between the first and **second applications** .

7/5/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2003 JPO & JAPIO. All rts. reserv.

06890241 **Image available**
DISPLAY CONTROLLER AND DISPLAY METHOD

PUB. NO.: 2001-117750 [JP 2001117750 A]
PUBLISHED: April 27, 2001 (20010427)
INVENTOR(s): SHIN YOSHITAKA
OKUDE MARIKO
ENDO YOSHINORI
SATOYAMA MOTOAKI
NAKATSUKA YASUHIRO
MATSUO SHIGERU
APPLICANT(s): HITACHI LTD
XANAVI INFORMATICS CORP
APPL. NO.: 11-301203 [JP 99301203]
FILED: October 22, 1999 (19991022)
INTL CLASS: G06F-003/14; G09B-029/00; G09G-005/06; G09G-005/14

ABSTRACT

PROBLEM TO BE SOLVED: To **display** the processing results of **plural applications** on respective **display** environments optimum to respective **applications** .

SOLUTION: The **display** controller is provided with a foreground **frame buffer** 310, a background **frame buffer** 311, a Java graphics driver 210 for developing a GUI picture on the foreground **frame buffer** 310 in accordance with instructions outputted from a Java application 204, a native graphics driver 211 for developing a map image on the background **frame buffer** 311 in accordance with an instruction from a native application and a graphics processor 102 for reading out images stored in the buffers 310, 311 respectively and displaying the read images on the display screen of a display 111.

7/5/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO

06434478 **Image available**
IMAGE PROCESSOR

PUB. NO.: 2000-020044 [JP 2000020044 A]
PUBLISHED: January 21, 2000 (20000121)
INVENTOR(s): KAKEBE ISAO
MATSUO SHIGERU
KOGA KAZUYOSHI
SHIN YOSHITAKA
NAKATSUKA YASUHIRO
YAMAGISHI KAZUSHIGE
KANAMARU KATSUO
APPLICANT(s): HITACHI LTD
HITACHI ULSI SYSTEMS CO LTD
APPL. NO.: 10-188557 [JP 98188557]
FILED: July 03, 1998 (19980703)
INTL CLASS: G09G-005/06; G06T-001/00

ABSTRACT

PROBLEM TO BE SOLVED: To prevent deterioration in picture quality even in the case of **displaying** with **various application programs** by mapping from the color data of (a) bits to a color set in a color palette and gradation-reducing to the color data of (m) bits equal to or smaller than (a) bits.

SOLUTION: In the case of an index color mode, a display of an image reads out successively the index pixel data stored in a **frame buffer** 141, and converts the index pixel data to the RGB data by the color palette 132 to send them to a DAC 133. A CPU 11 converts the image data to the color data of (a) bits, and selects a pixel conversion filter 112 long in processing time in the case of displaying a still image, and selects the pixel conversion filter 112 short in processing time in the case of displaying an animation. Then, the CPU 11 maps from the color data of (a) bits to the color set in the color palette 132, and gradation-reduces to the color data of (m) bits equal to or smaller than (a) bits.

7/5/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO

03848621 **Image available**
INFORMATION PROCESSOR

PUB. NO.: 04-213721 [JP 4213721 A]
PUBLISHED: August 04, 1992 (19920804)
INVENTOR(s): HISAMATSU YUTAKA
APPLICANT(s): SEIKO EPSON CORP [000236] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 02-401113 [JP 90401113]
FILED: December 10, 1990 (19901210)
INTL CLASS: [5] G06F-003/153
JAPIO CLASS: 45.3 (INFORMATION PROCESSING -- Input Output Units)
JOURNAL: Section: P, Section No. 1455, Vol. 16, No. 559, Pg. 127, November 30, 1992 (19921130)

ABSTRACT

PURPOSE: To allow **plural** modes to correspond to an **application** by executing a **display** conversion to a system for supporting plural display

modes in accordance with the display mode.

CONSTITUTION: When an application software 11 operated by a CPU 15 sets a display mode of a system, and data is written by a format corresponding to the mode set to a first **display buffer** 16, its data is converted in accordance with the display mode of a hardware by a display conversion mechanism 17, set to a second **display buffer** 18, and displayed on a display device 19. In this case, a format of the display data written in a first **display buffer** 16 is varied in accordance with the mode set by the **application software** 11. Accordingly, the **display** conversion mechanism 17 executes conversion of a character code and a display attribute of a character, and different display modes are realized by one hardware.

7/5/5 (Item 5 from file: 347)
DIALOG(R)File 347:JAPIO

03226033 **Image available**
DOUBLE BUFFERING SYSTEM UNDER MULTIWINDOW

PUB. NO.: 02-201533 [JP 2201533 A]
PUBLISHED: August 09, 1990 (19900809)
INVENTOR(s): OGAWA KENJI
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 01-021209 [JP 8921209]
FILED: January 30, 1989 (19890130)
INTL CLASS: [5] G06F-003/14
JAPIO CLASS: 45.3 (INFORMATION PROCESSING -- Input Output Units)
JOURNAL: Section: P, Section No. 1123, Vol. 14, No. 494, Pg. 48, October 26, 1990 (19901026)

ABSTRACT

PURPOSE: To perform double buffering of each window under multiwindow by controlling drawing requests from **plural** drawing **programs** .

CONSTITUTION: Contents displayed on windows corresponding to respective drawing **programs** on a bit map **display** device 9 are written in a **frame buffer** 6 for front or a **frame buffer** 7 for rear by drawing programs A to C. Matching among processings of **plural** drawing **programs** A to C is obtained by a drawing face determining mechanism 2, a drawing request segmenting mechanism 3, a virtual **frame buffer** 4, a virtual **frame buffer** write mechanism 5, and a front/ rear switching mechanism 8. Thus, double buffering of each window is possible under multiwindow where the drawing processing onto the bit map display device 9 is performed.

7/5/6 (Item 6 from file: 347)
DIALOG(R)File 347:JAPIO

02551818 **Image available**
SCREEN INFORMATION CONTROL SYSTEM

PUB. NO.: 63-168718 [JP 63168718 A]
PUBLISHED: July 12, 1988 (19880712)
INVENTOR(s): YAMASHITA IWAO
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 62-000506 [JP 87506]
FILED: January 07, 1987 (19870107)
INTL CLASS: [4] G06F-003/14
JAPIO CLASS: 45.3 (INFORMATION PROCESSING -- Input Output Units)
JOURNAL: Section: P, Section No. 788, Vol. 12, No. 439, Pg. 135, November 18, 1988 (19881118)

ABSTRACT

PURPOSE: To share the screen of a **display** device by **plural programs** even in an information processing system with a small size to which an area for saving and restoring screen information cannot be allowed to an auxiliary memory device by providing a screen information storage mechanism so as to save and restore the screen information.

CONSTITUTION: When an input/output request is issued from a program P(sub 2) obtaining newly the control right of a screen of a display device 4 to a screen information control mechanism 1, the analysis of the input/output request by a program P(sub 1) is stopped and a screen information storage buffer 31 for the program P(sub 1) is ensured to the screen information storage mechanism 3 to request the save of the **screen** information of the **program** P(sub 1). The **screen** information storage mechanism 3 saves the **screen** information of the **program** P(sub 1) when the save request from the screen information **display buffer** 2 to the screen information storage buffer 31 and informs the result to the screen information control mechanism 1. The screen information control mechanism 1 receives the notice to analyze the input/output request of the program P(sub 2) and to generate the screen information to the screen information **display buffer** 2 and outputs the screen information to a display device 4.

7/5/7 (Item 1 from file: 350)

015522938 **Image available**
WPI Acc No: 2003-585085/200355
XRPX Acc No: N03-465757

Multiple display configuration support method in e.g. portable computer, involves providing data from different portions of frame buffer **to** display controller **for presentation, when respective visual display is selected**

Patent Assignee: CIOLAC A A (CIOL-I)
Inventor: CIOLAC A A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030048275	A1	20030313	US 2001954685	A	20010911	200355	B

Priority Applications (No Type Date): US 2001954685 A 20010911
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030048275	A1		14	G06F-012/02	

Abstract (Basic): US 20030048275 A1

NOVELTY - The video data associated with multiple virtual displays are stored in respective portions (142,144) of a **frame buffer** (140) of a **video controller** (130). A virtual display to be presented by a display device (170) is selected by identifying a mouse position. The data from respective portion of **frame buffer** are provided to the **video controller** for presentation by the display device, when corresponding virtual display is selected.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) multiple display configuration support system; and computer-readable medium storing **multiple display** configuration support **program** .

USE - For supporting multiple display configuration in information handling system such as portable computer e.g. laptop, personal digital assistant (PDA), hand-held computer, cable set-top box and Internet enabled device such as cellular phone.

ADVANTAGE - Allows a system desktop to be expanded across multiple virtual displays without a need for extra hardware to support multiple display devices.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the multiple display configuration support system.

video controller (130)
frame buffer (140)
buffer portions (142,144)
display device (170)
pp; 14 DwgNo 1/5
Title Terms: MULTIPLE; DISPLAY; CONFIGURATION; SUPPORT; METHOD; PORTABLE; COMPUTER; DATA; PORTION; FRAME; BUFFER; DISPLAY; CONTROL; PRESENT; RESPECTIVE; VISUAL; DISPLAY; SELECT
Derwent Class: T01; T04
International Patent Class (Main): G06F-012/02
International Patent Class (Additional): G06F-015/00; G06T-001/00
File Segment: EPI

7/5/8 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015019944 **Image available**
WPI Acc No: 2003-080461/200308
XRPX Acc No: N03-062822
Information processor has program selecting switch to select prescribed buffer, depending on user input and displays program **of selected buffer in sub LCD**
Patent Assignee: TOSHIBA KK (TOKE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2002287951	A	20021004	JP 200184324	A	20010323	200308	B

Priority Applications (No Type Date): JP 200184324 A 20010323
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2002287951	A		8	G06F-003/14	

Abstract (Basic): JP 2002287951 A
NOVELTY - A microprocessor (21) comprises **several display buffers** (210) storing **displayed program** , from which prescribed buffer is selected depending on input instructions by a **program** selecting switch PSSW (25). **Display** of **program** is performed on sub LCD (22), based on the content of the selected buffer.
DETAILED DESCRIPTION - An INDEPENDENT CLAIMS is included for information processor control method.
USE - Information processor e.g. portable computer.
ADVANTAGE - Performs flexible **display** of stored **program** using sub LCD.
DESCRIPTION OF DRAWING(S) - The figure shows the structure of principal portion of the information processor.
Microprocessor (21)
Sub LCD (22)
PSSW (25)
Display buffer (210)
pp; 8 DwgNo 1/7
Title Terms: INFORMATION; PROCESSOR; PROGRAM; SELECT; SWITCH; SELECT; PRESCRIBED; BUFFER; DEPEND; USER; INPUT; DISPLAY; PROGRAM; SELECT; BUFFER ; SUB; LCD
Derwent Class: P85; T01; T04
International Patent Class (Main): G06F-003/14
International Patent Class (Additional): G09G-005/00
File Segment: EPI; EngPI

7/5/9 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014982851 **Image available**
WPI Acc No: 2003-043366/200304

XRPX Acc No: N03-034046
Information processor e.g. portable computer has sub-LCD for displaying content of buffer, representing operation of program selection switch
Patent Assignee: TOSHIBA KK (TOKE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2002258825	A	20020911	JP 200157127	A	20010301	200304	B

Priority Applications (No Type Date): JP 200157127 A 20010301
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2002258825	A		8	G09G-005/00	

Abstract (Basic): JP 2002258825 A
NOVELTY - A **display buffer** (210) stores content representing the operation of a program selecting switch (PSSW) (25) which is used as input device of a microprocessor (21). A sub-LCD (22) controlled by the microprocessor displays the contents of the buffer.
DETAILED DESCRIPTION - An **INDEPENDENT** CLAIM is included for **program** choice method of information processor.
USE - Information processor with sub-LCD e.g. portable computer.
ADVANTAGE - Improves versatility by providing a sub-LCD for **displaying** content representing operation of the **program** selecting switch.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the information processor. (Drawing includes non-English language text).
Microprocessor (21)
Sub-LCD (22)
PSSW (25)
Display buffer (210)
pp; 8 DwgNo 1/7
Title Terms: INFORMATION; PROCESSOR; PORTABLE; COMPUTER; SUB; LCD; DISPLAY; CONTENT; BUFFER; REPRESENT; OPERATE; PROGRAM; SELECT; SWITCH
Derwent Class: P85; T01
International Patent Class (Main): G09G-005/00
International Patent Class (Additional): G06F-003/00; G06F-003/14; G06F-009/445
File Segment: EPI; EngPI

7/5/10 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014918927 **Image available**
WPI Acc No: 2002-739634/200280
XRPX Acc No: N02-582652
Computer controlled user interactive display **system for e-commerce** application , displays **color varying with access time period of window containing secured data along border of window**
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: MADDALOZZO J; MCBREARTY G F; ROJAS H; SHIEH J M
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6445400	B1	20020903	US 99404279	A	19990923	200280	B

Priority Applications (No Type Date): US 99404279 A 19990923
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6445400	B1		12	G06F-003/00	

Abstract (Basic): US 6445400 B1
NOVELTY - A **frame buffer** stores multiple displayed overlapping windows (61-65) comprising secured data. Each of the windows is tracked for a limited time period for a user access to the window. A color

varying with the time period is displayed along the borders (66-70) of each of the windows.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) Method for alerting interactive users to variable parameters;

(2) Computer **program** for interactive control of **display** system;

(3) Method of alerting user to passage of time period;

(4) Time-related data security method;

(5) Computer program for alerting user to passage of time period; and

(6) Computer program for controlling time-related data security.

USE - Computer controlled user interactive display system for LANs and WANs such as Internet, used for e-commerce and **other** business **applications** .

ADVANTAGE - Simplifies the tracking of access time periods to secure data in computer controlled user interactive display system. Even when a window is overlapped by another window, it is likely that some portion of its border would still be visible to inform the user of the timeout, based upon the color change in the border.

DESCRIPTION OF DRAWING(S) - The figure shows a diagrammatic view of the display screen with hierarchy of windows.

Windows (61-65)

Borders of windows (66-70)

pp; 12 DwgNo 5/7

Title Terms: COMPUTER; CONTROL; USER; INTERACT; DISPLAY; SYSTEM; APPLY; DISPLAY; COLOUR; VARY; ACCESS; TIME; PERIOD; WINDOW; CONTAIN; SECURE; DATA; BORDER; WINDOW

Derwent Class: T01

International Patent Class (Main): G06F-003/00

File Segment: EPI

7/5/11 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

014914770 **Image available**

WPI Acc No: 2002-735477/200280

XRPX Acc No: N02-579893

User interface coupling method involves creating complex display using layout pattern of data extracted from display buffer **of user** interface **related** application , **for** displaying different application **data**

Patent Assignee: RICOH KK (RICO)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2001265563	A	20010928	JP 2000380411	A	20001214	200280	B

Priority Applications (No Type Date): US 2000532412 A 20000322

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001265563	A		20	G06F-003/14	

Abstract (Basic): JP 2001265563 A

NOVELTY - A layout pattern is recognized from the data extracted from a **display buffer** of an **application** which is related to an user interface. A complex display is created for displaying the data generated by a **different application** , using the **layout** pattern.

USE - For coupling user **interface** of some **applications** .

ADVANTAGE - User interfaces are coupled by the simple method.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the user interface coupling method. (Drawing includes non-English language text).

pp; 20 DwgNo 1/1

Title Terms: USER; INTERFACE; COUPLE; METHOD; COMPLEX; DISPLAY; LAYOUT; PATTERN; DATA; EXTRACT; DISPLAY; BUFFER; USER; INTERFACE; RELATED; APPLY;

DISPLAY; APPLY; DATA
Derwent Class: T01
International Patent Class (Main): G06F-003/14
International Patent Class (Additional): G06F-003/00
File Segment: EPI

7/5/12 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014583676 **Image available**
WPI Acc No: 2002-404380/200243
XRPX Acc No: N02-317446

Video memory manager for use in video recorder for recording video programs on disc drive with controller to determine if disc drive has sufficient space to store next program

Patent Assignee: KONINK PHILIPS ELECTRONICS NV (PHIG)
Inventor: AGNIHOTRI L; DIMITROVA N
Number of Countries: 023 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200203682	A2	20020110	WO 2001EP7078	A	20010620	200243	B
KR 2002026377	A	20020409	KR 2002702479	A	20020226	200267	
EP 1300002	A2	20030409	EP 2001956498	A	20010620	200325	
			WO 2001EP7078	A	20010620		
CN 1395794	A	20030205	CN 2001802477	A	20010620	200334	

Priority Applications (No Type Date): US 2000609722 A 20000630
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200203682	A2	E	22	H04N-005/00	
Designated States (National): CN JP KR					
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR					
KR 2002026377	A			G11B-027/031	
EP 1300002	A2	E		H04N-005/00	Based on patent WO 200203682
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR					
CN 1395794	A			H04N-005/765	

Abstract (Basic): WO 200203682 A2

NOVELTY - A disc-based video recorder of the recording system (100) makes use of a hand-held remote control and infrared sensor interface in place of a user input/output interface and may be coupled to a conventional TV set, while the **video memory controller** (110) is implemented using a conventional data processor executing a video memory application stored in memory (120).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for a method of managing **plural** stored video **programs** and a computer readable medium with instructions.

USE - Managing storage space of a disc drive-based video recorder.

ADVANTAGE - Selecting **program** to be overwritten based on **viewer** criteria.

DESCRIPTION OF DRAWING(S) - The drawing shows the system

System (100)

Video memory controller (110)

Memory (120)

pp; 22 DwgNo 1/3

Title Terms: VIDEO; MEMORY; MANAGE; VIDEO; RECORD; RECORD; VIDEO; PROGRAM; DISC; DRIVE; CONTROL; DETERMINE; DISC; DRIVE; SUFFICIENT; SPACE; STORAGE; PROGRAM
Derwent Class: W03; W04
International Patent Class (Main): G11B-027/031; H04N-005/00; H04N-005/765
International Patent Class (Additional): G11B-027/034; G11B-027/36; H04N-005/781; H04N-005/782
File Segment: EPI

7/5/13 **(Item 7 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

014213437 **Image available**
WPI Acc No: 2002-034135/200204
XRPX Acc No: N02-026317

Simultaneous multiple **video** programs **recording-** viewing **method involves decoding video signals from different video sources using different clock signals corresponding to display and record conditions**

Patent Assignee: THOMSON LICENSING SA (CSFC)
Inventor: CARLSGAARD E S; HORLANDER T E
Number of Countries: 096 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200172035	A2	20010927	WO 2001US7454	A	20010308	200204	B
AU 200187258	A	20011003	AU 200187258	A	20010308	200210	
EP 1264476	A2	20021211	EP 2001959950	A	20010308	200301	
			WO 2001US7454	A	20010308		
BR 200109291	A	20021217	BR 20019291	A	20010308	200309	
			WO 2001US7454	A	20010308		
KR 2002084203	A	20021104	KR 2002712162	A	20020916	200320	
CN 1418430	A	20030514	CN 2001806730	A	20010308	200355	
JP 2003528549	W	20030924	JP 2001570071	A	20010308	200365	
			WO 2001US7454	A	20010308		

Priority Applications (No Type Date): US 2000190417 P 20000317
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200172035	A2	E	15	H04N-005/45	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW				
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200187258	A			H04N-005/45	Based on patent WO 200172035
EP 1264476	A2	E		H04N-005/45	Based on patent WO 200172035
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
BR 200109291	A			H04N-005/45	Based on patent WO 200172035
KR 2002084203	A			H04N-005/45	
CN 1418430	A			H04N-005/45	
JP 2003528549	W		19	H04N-005/45	Based on patent WO 200172035

Abstract (Basic): WO 200172035 A2

NOVELTY - The video signals from different video sources, are decoded by a same reference clock signal when one of the signal is displayed as main picture (54) and other as picture-in-picture (PIP) (56). The video signals are decoded using different clock signals, when one is to be displayed and other is to be recorded.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for simultaneous recording and viewing apparatus.

USE - For simultaneous recording and **viewing two different** video **programs** such as satellite television program and standard terrestrial program in satellite television receiver, high definition television (HDTV) receiver, digital cable receiver, video cassette receiver (VCR) etc.

ADVANTAGE - Common memory space can be used for PIP and recordable **frame buffers** , hence reducing the decoder design and cost.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the video decoder system contained within television receiver or video processing device.

Main picture (54)
PIP (56)
pp; 15 DwgNo 1/3

Title Terms: SIMULTANEOUS; MULTIPLE; VIDEO; PROGRAM; RECORD; VIEW; METHOD;

DECODE; VIDEO; SIGNAL; VIDEO; SOURCE; CLOCK; SIGNAL; CORRESPOND; DISPLAY; RECORD; CONDITION
Derwent Class: W03
International Patent Class (Main): H04N-005/45
International Patent Class (Additional): G11B-020/10; H04N-005/44; H04N-005/765; H04N-005/92
File Segment: EPI

7/5/14 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013901534 **Image available**
WPI Acc No: 2001-385747/200141
XRPX Acc No: N01-283330
Display controller for computer used in navigation system, stores image developed for foreground and background based on indication of Java and native application in respective frame buffer **according to application**
Patent Assignee: HITACHI LTD (HITA); XANAVI INFORMATICS KK (XANA-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2001117750	A	20010427	JP 99301203	A	19991022	200141	B

Priority Applications (No Type Date): JP 99301203 A 19991022
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001117750	A		20	G06F-003/14	

Abstract (Basic): JP 2001117750 A
NOVELTY - **Frame buffers** are provided based on each application. Java graphics driver develops image for foreground (310) based on indication of Java application (204) and native graphics driver develops image for backgrounds (311) based on indication of native application (203). Developed images are stored in respective **frame buffers** . The stored images are processed by a processor (102) and displayed on display screen of display drive (111).
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the display procedure.
USE - Display controller for computer used in navigation system.
ADVANTAGE - The process result due to **several application** is **displayed** on the optimum **display** environment for each **application** .

DESCRIPTION OF DRAWING(S) - The figure shows the schematic block diagram of display system. (Drawing includes non-English language text).
Graphics processor (102)
Display drive (111)
Native application (203)
Java application (204)
Foreground image (310)
Background image (311)
pp; 20 DwgNo 1/17
Title Terms: DISPLAY; CONTROL; COMPUTER; NAVIGATION; SYSTEM; STORAGE; IMAGE; DEVELOP; FOREGROUND; BACKGROUND; BASED; INDICATE; NATIVE; APPLY; RESPECTIVE; FRAME; BUFFER; ACCORD; APPLY
Derwent Class: P85; T01
International Patent Class (Main): G06F-003/14
International Patent Class (Additional): G09B-029/00; G09G-005/06; G09G-005/14
File Segment: EPI; EngPI

7/5/15 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013822898 **Image available**
WPI Acc No: 2001-307110/200132
XRPX Acc No: N01-219696

Computer memory address allocation for graphic information display, using graphic address re-mapping table as a memory virtual address register file that enables address conversion to physical address with access provided by address pointer

Patent Assignee: MICRON TECHNOLOGY INC (MICR-N)
Inventor: PORTERFIELD A K
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6192457	B1	20010220	US 97887868	A	19970702	200132	B

Priority Applications (No Type Date): US 97887868 A 19970702
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6192457	B1		10	G06F-017/60	

Abstract (Basic): US 6192457 B1

NOVELTY - Graphics address re-mapping table with virtual registers is stored in memory each storing a pointer that references target location. In response to receiving at graphics interface a transaction request from **graphics controller** , including requested virtual address from **memory** requester, the virtual address is converted to physical address of one of selected re-mapping table virtual registers including combining re-mapping table index with first portion of requested virtual address.

DETAILED DESCRIPTION - Selected virtual register stored pointer is retrieved and used to reference and access selected target memory location containing stored graphics data for use by graphics controller.

INDEPENDENT CLAIM is also included for a method for managing memory in a computer system having a system memory and system controller that controls the system memory.

USE - For **two** and three-dimensional graphic **display applications** implemented on computer systems, where memory is used to store the graphics data that produces a graphical display.

ADVANTAGE - Enables a re-mapping table to be stored in a computer system memory rather than a system controller. It provides a low cost alternative to implementing a large register file on a memory **interface** implemented by an **Application** Specific Integrated Circuit (ASCI).

DESCRIPTION OF DRAWING(S) - Shows data flow chart for graphics controller and accelerated graphics port (AGP) interconnected to memory and graphic address re-mapping table implemented as a virtual register file.

pp; 10 DwgNo 4/4

Title Terms: COMPUTER; MEMORY; ADDRESS; ALLOCATE; GRAPHIC; INFORMATION; DISPLAY; GRAPHIC; ADDRESS; MAP; TABLE; MEMORY; VIRTUAL; ADDRESS; REGISTER ; FILE; ENABLE; ADDRESS; CONVERT; PHYSICAL; ADDRESS; ACCESS; ADDRESS; POINT
Derwent Class: T01
International Patent Class (Main): G06F-017/60
File Segment: EPI

7/5/16 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013533708 **Image available**
WPI Acc No: 2001-017914/200103
XRPX Acc No: N01-013671

Digital video method and apparatus for clipping video information before scaling uses server as video transmitter with thin client acting as receiver

Patent Assignee: SUN MICROSYSTEMS INC (SUNM)
Inventor: HANKO J G
Number of Countries: 025 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 1043891	A2	20001011	EP 2000107391	A	20000405	200103	B

Priority Applications (No Type Date): US 99289785 A 19990409
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1043891	A2	E	24	H04N-005/45	

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): EP 1043891 A2

NOVELTY - The method executes applications on a server separated from a **frame** , **buffer** on a thin client by a network. The network acts as a transmission medium (203) and the server can be considered to be a video transmitter with the thin client acting as the receiver. By clipping of image data prior to transmission and scaling, the amount of image data transmitted over the network is minimized for greater efficiency.

DETAILED DESCRIPTION - **Independent** claims describe a computer **program** product and an apparatus.

USE - As a method and an apparatus for clipping video information before scaling.

ADVANTAGE - Provides a more efficient video display process for networks.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram of the video **display** system having **multiple applications** .

the transmission medium (203)

pp; 24 DwgNo 2/10

Title Terms: DIGITAL; VIDEO; METHOD; APPARATUS; CLIP; VIDEO; INFORMATION; SCALE; SERVE; VIDEO; TRANSMIT; THIN; CLIENT; ACT; RECEIVE
Derwent Class: T01; W02
International Patent Class (Main): H04N-005/45
International Patent Class (Additional): H04N-005/262
File Segment: EPI

7/5/17 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013302759 **Image available**
WPI Acc No: 2000-474694/200041
XRPX Acc No: N00-354105

Multiple frame buffers **managing method for use in interactive computer graphics system, involves removing oldest** frame buffer **from queue after completion of its predetermined frame time**

Patent Assignee: SILICON GRAPHICS INC (SILI-N)
Inventor: AKELEY K B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6075543	A	20000613	US 96743883	A	19961106	200041	B
			US 98217193	A	19981222		

Priority Applications (No Type Date): US 96743883 A 19961106; US 98217193 A 19981222
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6075543	A		26	G06F-013/00	Cont of application US 96743883 Cont of patent US 5933155

Abstract (Basic): US 6075543 A

NOVELTY - An oldest **frame buffer** (402) maintained in a FIFO queue (404) is unnamed and a **frame buffer** (406) newly appended in the queue is named as front buffer and the oldest buffer is displayed.

A **frame buffer** (408) not included in the queue is named to be the back buffer to render entire frame in back buffer. The oldest buffer is removed from queue after the completion of its predetermined frame time.

DETAILED DESCRIPTION - The back buffer is appended in the queue after completing the rendering of entire frame in back buffer. The front buffer is unnamed and the back buffer is renamed as new front buffer. An INDEPENDENT CLAIM is also included for multiple **frame buffers** managing system.

USE - For managing multiple **frame buffers** in non-open graphics library, interactive computer graphics systems and graphics applications.

ADVANTAGE - Does not require any new buffer names or access methods as **two** buffer **application** programming **interface** is maintained. Enables easy incorporation of multi-buffer features and capabilities into existing or new applications since the change in the programming is very less. The usage semantics of **frame buffers** are completely decoupled from the number of buffers, hence the system can allocate or deallocate buffers as desired without having to notify the **application**. Controls and bounds sender to **display** latency irrespective of number of **frame buffers** used.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the buffer arrangement.

Oldest **frame buffer** (402)

FIFO queue (404)

Frame buffers (406,408)

pp; 26 DwgNo 4/14

Title Terms: MULTIPLE; FRAME; BUFFER; MANAGE; METHOD; INTERACT; COMPUTER; GRAPHIC; SYSTEM; REMOVE; FRAME; BUFFER; QUEUE; AFTER; COMPLETE; PREDETERMINED; FRAME; TIME

Derwent Class: T01

International Patent Class (Main): G06F-013/00

File Segment: EPI

7/5/18 (Item 12 from file: 350)

013111311 **Image available**

WPI Acc No: 2000-283182/200024

XRPX Acc No: N00-213165

Active matrix liquid crystal display device used in laptop computers, has pixel cells with capacitors for storing data associated with at least one color, interposed between two substrates

Patent Assignee: FED CORP (FEDF-N)

Inventor: JONES G W; PRACHE O F

Number of Countries: 019 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200014713	A1	20000316	WO 99US20199	A	19990902	200024	B

Priority Applications (No Type Date): US 9899293 P 19980904

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200014713	A1	E	17	G09G-003/36	

Designated States (National): US

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Abstract (Basic): WO 200014713 A1

NOVELTY - At least one pixel cell is interposed between a pair of substrates and is defined by overlapping regions of electrical circuitry of respective substrates. The pixel cell includes at least one capacitor for storing data associated with at least one color.

DETAILED DESCRIPTION - The two opposing substrates have at least one electronic circuitry, respectively. The circuits form an active matrix. At least one of circuits has switching element operatively coupled to at least one capacitor.

USE - Active matrix liquid crystal display device is used in laptop computers, pocket television systems, watches, pagers, body mountable **display** device and **other** electronic **display applications** .

ADVANTAGE - The LCD device eliminates need for an external storage medium to hold primary color fields, by incorporating the memory itself. Avoids need for use of an external **frame buffer** and has reduced power requirements. Since less components are used, more economical LCD device is obtained. Offers LCD device of lightweight and with more compact design. The LCD device is capable of displaying data without any increase in operating frequency.

DESCRIPTION OF DRAWING(S) - The figure shows pixel cell for liquid crystal cell having integrated memory.

pp; 17 DwgNo 2/3

Title Terms: ACTIVE; MATRIX; LIQUID; CRYSTAL; DISPLAY; DEVICE; COMPUTER; PIXEL; CELL; CAPACITOR; STORAGE; DATA; ASSOCIATE; ONE; INTERPOSED; TWO; SUBSTRATE

Derwent Class: P81; P85; T04; U14

International Patent Class (Main): G09G-003/36

International Patent Class (Additional): G02F-001/133; G02F-001/1343; G02F-001/136; G09G-005/00

File Segment: EPI; EngPI

7/5/19 (Item 13 from file: 350)

DIALOG(R)File 350:Derwent WPIX

013057153 **Image available**

WPI Acc No: 2000-229021/200020

XRPX Acc No: N00-172229

Network connected information providing apparatus comprises display controller which synthesizes user image data and goods image data to produce synthesized display data which is displayed on user terminal

Patent Assignee: DAINIPPON PRINTING CO LTD (NIPQ)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2000048081	A	20000218	JP 98219055	A	1998080	200020	B

Priority Applications (No Type Date): JP 98219055 A 19980803

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000048081	A		13	G06F-017/60	

Abstract (Basic): JP 2000048081 A

NOVELTY - The goods image data are stored in memory. The image data specified by user (10) is acquired from data stored beforehand in user registration database and then goods are selected. The image data corresponding to the goods selected by user is acquired from **memory** . A **display controller** synthesizes user image data and goods image data and produces synthesized display data which is displayed on user terminal.

USE - Used in network connected information providing apparatus for performing various services such as delivery of news, the downloading of **various software programs** and **display** of image and vocal data.

ADVANTAGE - Information providing is done in the form customized for every user, since the user's own image data is synthesized with that provided by the internet and it can be received from any terminal. Simulation is done more accurately, since user and goods image data are synthesized more realistically.

DESCRIPTION OF DRAWING(S) - The figure shows block diagram of information providing apparatus.

User (10)

pp; 13 DwgNo 1/10

Title Terms: NETWORK; CONNECT; INFORMATION; APPARATUS; COMPRISE; DISPLAY; CONTROL; USER; IMAGE; DATA; GOODS; IMAGE; DATA; PRODUCE; DISPLAY; DATA; DISPLAY; USER; TERMINAL

Derwent Class: T01
International Patent Class (Main): G06F-017/60
International Patent Class (Additional): G06F-013/00; G06F-017/30; G06T-001/00
File Segment: EPI

7/5/20 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012965240 **Image available**
WPI Acc No: 2000-137091/200012
XRPX Acc No: N00-102466

Three dimensional graphics generation method using stereoscopic filter in computer system

Patent Assignee: KONINK PHILIPS ELECTRONICS NV (PHIG); PHILIPS AB (PHIG)
Inventor: BAR-NAHUM G
Number of Countries: 023 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200000934	A2	20000106	WO 99IB1104	A	19990614	200012	B
EP 1038271	A2	20000927	EP 99922458	A	19990614	200048	
			WO 99IB1104	A	19990614		
CN 1277698	A	20001220	CN 99801455	A	19990614	200121	
KR 2001023290	A	20010326	KR 2000701924	A	20000225	200161	
JP 2002519792	W	20020702	WO 99IB1104	A	19990614	200246	
			JP 2000557434	A	19990614		
US 6496183	B1	20021217	US 98107918	A	19980630	200307	
TW 514836	A	20021221	TW 2000101981	A	20000203	200358	

Priority Applications (No Type Date): US 98107918 A 19980630
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200000934	A2	E	25	G06T-015/00	
Designated States (National): CN JP KR					
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
EP 1038271	A2	E		G06T-015/00	Based on patent WO 200000934
Designated States (Regional): DE FR GB IT					
CN 1277698	A			G06T-015/00	
KR 2001023290	A			G06T-015/00	
JP 2002519792	W		33	G06T-017/40	Based on patent WO 200000934
US 6496183	B1			G06T-015/00	
TW 514836	A			G06T-015/00	

Abstract (Basic): WO 200000934 A2

NOVELTY - A function call request for a 3D rendering operation for graphic object is generated in a 3D rendering module (18). This request is received by a filter (26) which generates several viewpoint data for 3D graphic object. This view point data is transmitted to a display driver (28).

DETAILED DESCRIPTION - The view point data comprises left eye view point data and right eye view point data stored in a **frame buffer** (31). These view points are generated by receiving rendering request from 3D module (18) with 3D objects as arguments. The target projection plane is substituted with projection planes based on a viewer model input. An INDEPENDENT CLAIM is also included for a computer readable medium that includes instruction for generating 3D graphics.

USE - For generating three dimensional graphic data using stereoscopic filter in computer system, in video game.

ADVANTAGE - Stereoscopic filter is configurable with any 3D acceleration driver, as communication between filter and the driver is over the same **applications** programmer **interface** (API). OS **software** and third party components do not have to be modified to accommodate the stereoscopic filter, thereby saves considerable time and cost associated with customizing **various software** and hardware components.

DESCRIPTION OF DRAWING(S) - The figure shows a computer system upon which 3D graphics is generated.
3D module (18)
Stereoscopic filter (26)
Display Driver (28)
Frame buffer (31)
pp; 25 DwgNo 2/11
Title Terms: THREE; DIMENSION; GRAPHIC; GENERATE; METHOD; STEREOSCOPIC; FILTER; COMPUTER; SYSTEM
Derwent Class: T01; W02; W04
International Patent Class (Main): G06T-015/00; G06T-017/40
International Patent Class (Additional): H04N-013/00
File Segment: EPI

7/5/21 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012481220 **Image available**
WPI Acc No: 1999-287328/199924
XRPX Acc No: N99-214577
Video data processing method for digital computer graphics
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: FLURRY G A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5898441	A	19990427	US 95491461	A	19950616	199924	B

Priority Applications (No Type Date): US 95491461 A 19950616
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5898441	A		23	G09G-005/00	

Abstract (Basic): US 5898441 A
NOVELTY - Video instructions from a main processor (110) are received by a video adapter (200) which executes the instructions using video processors and updates **frame buffers** (240) and the look-up tables (245). A video decoder (222) converts incoming video into digital signals. A DAC (250) converts digital signals to RGB signals to be provided on graphics display (150).
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for video data processing apparatus.
USE - For digital computer graphics.
ADVANTAGE - Integration of video capture and monitoring is supported in the multiuser environment. **Multiple applications** with sequential images are **displayed** in proper order.
DESCRIPTION OF DRAWING(S) - The figure shows block diagram of digital computer.
Main processor (110)
Graphics display (150)
Video adaptor (200)
Decoder (222)
Frame buffers (240)
Look-up tables (245)
D/A Converter (250)
pp; 23 DwgNo 1/17
Title Terms: VIDEO; DATA; PROCESS; METHOD; DIGITAL; COMPUTER; GRAPHIC
Derwent Class: P85; T01
International Patent Class (Main): G09G-005/00
File Segment: EPI; EngPI

7/5/22 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011579798 **Image availabl**
WPI Acc No: 1997-556279/199751
XRPX Acc No: N97-463567
Data processor e.g. personal computer - includes several displays, connected to connectors provided in display board, whose number is made greater than one but less than or equal to number of memories that store data displayed on displays
Patent Assignee: HITACHI LTD (HITA)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 9269886	A	19971014	JP 9679825	A	19960402	199751	B

Priority Applications (No Type Date): JP 9679825 A 19960402
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9269886	A		43	G06F-003/14	

Abstract (Basic): JP 9269886 A
The processor has connectors (215-1 to 215-M) provided in a display board (206). The display board also has a controller (207) and memories (211-1-211-M). The connectors are connected to the controller. The memories are also connected to the controller.
Each connector is connected to its corresponding display (217-1-217-M). Each memory stores the data displayed on its corresponding **display** . The **controller** performs a **memory** control and a display control. The number of displays is made greater than one but less than or equal to the number of memories.
ADVANTAGE - Simultaneous **display** of **two** or more **applications** using separate **displays** , is possible. Improves working efficiency since large **display** area for every **application** is possible.
Dwg.2/41
Title Terms: DATA; PROCESSOR; PERSON; COMPUTER; DISPLAY; CONNECT; CONNECT; DISPLAY; BOARD; NUMBER; MADE; GREATER; ONE; LESS; EQUAL; NUMBER; MEMORY; STORAGE; DATA; DISPLAY; DISPLAY
Derwent Class: P85; T01; T04
International Patent Class (Main): G06F-003/14
International Patent Class (Additional): G09G-005/00
File Segment: EPI; EngPI

7/5/23 (Item 17 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011158951 **Image available**
WPI Acc No: 1997-136876/199713
XRPX Acc No: N97-113008
Program **information** display buffer **for programmable controller - involves storing map and list information corresponding to flow chart of each program, in program information memory**
Patent Assignee: YASKAWA ELECTRIC CORP (YASW)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 9016217	A	19970117	JP 95191131	A	19950703	199713	B

Priority Applications (No Type Date): JP 95191131 A 19950703
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9016217	A		4	G05B-019/048	

Abstract (Basic): JP 9016217 A
The method is applied to a programmable controller (1), connected to a programming panel (2) through a transmission line. The program information of the programmable controller is transmitted to the programming **panel** . A **program** information memory part stores a map information and a list information for the flow chart of each **program**

. A **display** control unit **displays** information of each flow chart.

When the programming panel displays the map information, the map information of each program drawing of programmable controller are transmitted to the programming panel. When a programming panel displays a list information, a TC unit of programmable controller transmits both map information and list information to the programming panel.

ADVANTAGE - **Displays several program** information simultaneously.

Dwg.1/3

Title Terms: PROGRAM; INFORMATION; DISPLAY; BUFFER; PROGRAM; CONTROL; STORAGE; MAP; LIST; INFORMATION; CORRESPOND; FLOW; CHART; PROGRAM; PROGRAM; INFORMATION; MEMORY

Derwent Class: T06; X25

International Patent Class (Main): G05B-019/048

International Patent Class (Additional): G05B-023/02

File Segment: EPI

7/5/24 (Item 18 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010554562 **Image available**

WPI Acc No: 1996-051515/199606

XRPX Acc No: N96-043158

Method of operating window operating system in multi-task computer system - allocates different portions of memory for use by different applications **as virtual** display **adaptors, image representation is stored in each portion**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM CORP (IBMC)

Inventor: EDGAR A D

Number of Countries: 005 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 690433	A1	19960103	EP 95304189	A	19950616	199606	B
JP 8016352	A	19960119	JP 95121067	A	19950519	199613	
US 5748866	A	19980505	US 94269337	A	19940630	199825	
JP 3374375	B2	20030204	JP 95121067	A	19950519	200317	

Priority Applications (No Type Date): US 94269337 A 19940630

Cited Patents: 1.Jnl.Ref; EP 524362; US 5025249; US 5233686

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 690433	A1	E	11	G09G-005/14	
Designated States (Regional): DE FR GB					
JP 8016352	A		17	G06F-003/14	
US 5748866	A		11	G06T-003/00	
JP 3374375	B2		17	G06F-003/14	Previous Publ. patent JP 8016352

Abstract (Basic): EP 690433 A

The method allocates different portions (76 to 82) of a memory (74) for use by **different applications** (16 to 20) as virtual **display** adapters. A representation of an image is stored in each portion. Each image corresponds to a **different application** .

Each image is reformatted into a second common memory (86). A display (64) corresp. to the contents of the second **memory** is generated. Each **display adapter** corresponds to a different video type or mode.

USE/ADVANTAGE - In computer system displays partic displays adapters utilised with them. Provides inexpensive general purpose display adapter system for use with computers compatible with multimedia software and range of **applications** having variety of **display** requirements. Adapter system is contention-less and has improved compatibility, each application could individually select its own virtual resolution, and applications are unaffected by their window size, transparency and overlay requirements.

Dwg.2/3

Title Terms: METHOD; OPERATE; WINDOW; OPERATE; SYSTEM; MULTI; TASK;

COMPUTER; SYSTEM; ALLOCATE; PORTION; MEMORY; APPLY; VIRTUAL; DISPLAY; ADAPT; IMAGE; REPRESENT; STORAGE; PORTION
Derwent Class: P85; T01; T04
International Patent Class (Main): G06F-003/14; G06T-003/00; G09G-005/14
File Segment: EPI; EngPI

7/5/25 (Item 19 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010435357 **Image available**
WPI Acc No: 1995-336677/199543
XRPX Acc No: N95-252490
Control of display generating views in window of display - uses application programs **to generate** views **on** display screen **of computer system**
Patent Assignee: TALIGENT INC (TALI-N)
Inventor: GAMMA E; KRAUS W F; ORTON D L
Number of Countries: 047 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9518436	A1	19950706	WO 94US10214	A	19940912	199543	B
AU 9478325	A	19950717	AU 9478325	A	19940912	199544	
US 5544301	A	19960806	US 93175915	A	19931230	199637	

Priority Applications (No Type Date): US 93175915 A 19931230
Cited Patents: EP 327781; EP 412924; EP 413484
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9518436	A1		50	G09G-005/14	

Designated States (National): AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA UZ VN
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE

AU 9478325	A				Based on patent WO 9518436
US 5544301	A		34	G06F-003/14	

Abstract (Basic): WO 9518436 A

The computer system comprises a screen buffer, a processor, an operating system, a window manager object and an automatic layout system. The screen buffer has a number of storage areas. Each storage area has a size and stores the screen information for one of the window areas. The processor is controlled by a number of application **programs** and enables storage of the **screen** information in the screen buffer.

The operating system cooperates with the processor for controlling the display device. The window manager object has a shared data area and is responsive to a change in a storage area for changing a storage areas size of at least one other storage area. Positioning and sizing of the view on the display is determined by the automatic layout system.

USE/ADVANTAGE - Operating system software for managing drawing areas. Provides a **view** system which gives **application** developers an automatic system for keeping the **display buffer** up-to-date.

Dwg.3/21

Title Terms: CONTROL; DISPLAY; GENERATE; VIEW; WINDOW; DISPLAY; APPLY; PROGRAM; GENERATE; VIEW; DISPLAY; SCREEN; COMPUTER; SYSTEM
Derwent Class: P85; T01; T04
International Patent Class (Main): G06F-003/14; G09G-005/14
File Segment: EPI; EngPI

7/5/26 (Item 20 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010313771 **Image available**

WPI Acc No: 1995-215029/199528
XRPX Acc No: N95-168653

Frame buffer for windowing operations - has array of memory cells for storing data indicating data to be displayed and address decoder for controlling access to memory cell array

Patent Assignee: SAMSUNG SEMICONDUCTOR INC (SMSU); SUN MICROSYSTEMS INC (SUNM)

Inventor: CHANG S C; HO H D; PRIEM C; SUN S C

Number of Countries: 019 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9512164	A2	19950504	WO 94US12307	A	19941027	199528	B
EP 677190	A1	19951018	EP 94932066	A	19941027	199546	
			WO 94US12307	A	19941027		
WO 9512164	A3	19950526	WO 94US12307	A	19941027	199616	
US 5528751	A	19960618	US 93145335	A	19931029	199630	
			US 95524474	A	19950907		
JP 8505255	W	19960604	WO 94US12307	A	19941027	199648	
			JP 95512813	A	19941027		
EP 677190	A4	19960724	EP 94932066	A		199701	
KR 335474	B	20020926	WO 94US12307	A	19941027	200322	
			KR 95702526	A	19950620		
EP 677190	B1	20030416	EP 94932066	A	19941027	200328	
			WO 94US12307	A	19941027		
DE 69432512	E	20030522	DE 632512	A	19941027	200341	
			EP 94932066	A	19941027		
			WO 94US12307	A	19941027		

Priority Applications (No Type Date): US 93145335 A 19931029; US 95524474 A 19950907

Cited Patents: EP 225197; EP 279693; US 4807189; US 5170157; US 4648077; US 4823302; US 5046023

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9512164	A2	E	30	G06F-012/06	
Designated States (National): JP KR					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
EP 677190	A1	E	1	G06F-012/06	Based on patent WO 9512164
Designated States (Regional): DE FR GB IT NL					
WO 9512164	A3			G06F-012/06	
US 5528751	A		14	G06F-012/00	Cont of application US 93145335
JP 8505255	W		33	G06F-012/00	Based on patent WO 9512164
EP 677190	A4			G06F-012/06	
KR 335474	B			G06F-012/06	Previous Publ. patent KR 95704741 Based on patent WO 9512164
EP 677190	B1	E		G06F-012/06	Based on patent WO 9512164
Designated States (Regional): DE FR GB IT NL					
DE 69432512	E			G06F-012/06	Based on patent EP 677190 Based on patent WO 9512164

Abstract (Basic): WO 9512164 A

The **frame buffer** includes an array of memory cells for storing data indicating pixels to be displayed, and an address decoder for controlling access to the array. The address decoder includes a column address decoder for selecting groups of adjacent columns of the array, a number of circuits for selectively writing to each of the columns of any of the groups of adjacent columns, and a number of colour value registers.

A latch stores pixel data equivalent to a row of pixel data to be displayed, and a circuit writes pixel data from selected groups of adjacent columns of the array to the latch. A connection unit connects either selected colour value registers, latches or data bus to the appts for selectively writing to each of the columns of any of the groups of adjacent columns.

USE/ADVANTAGE - **Frame buffer** for receiving, manipulating and transferring data for display at high rate of speed when used in system **displaying multiple applications** in windows on output **display** .

Title Terms: FRAME; BUFFER; OPERATE; ARRAY; MEMORY; CELL; STORAGE; DATA; INDICATE; DATA; DISPLAY; ADDRESS; DECODE; CONTROL; ACCESS; MEMORY; CELL; ARRAY
Derwent Class: P85; T01
International Patent Class (Main): G06F-012/00; G06F-012/06
International Patent Class (Additional): G09G-001/16; G09G-005/02; G09G-005/14; G09G-005/36
File Segment: EPI; EngPI

7/5/27 (Item 21 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009082689 **Image available**
WPI Acc No: 1992-210106/199226
XRPX Acc No: N92-159306
Writing method for frame buffer - **allowing direct writing to** frame buffer **without interfering with** other programs **controlled by window management** program
Patent Assignee: SUN MICROSYSTEMS INC (SUNM)
Inventor: FRANK E H; GOLSON S E; MCDONALD J; MCDONALD J F
Number of Countries: 009 Number of Patents: 011
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2251164	A	19920624	GB 9112159	A	19910606	199226	B
EP 493920	A1	19920708	EP 91311647	A	19911216	199228	
AU 9179162	A	19920625	AU 9179162	A	19910620	199233	
CA 2058269	A	19920622	CA 2058269	A	19911220	199237	
AU 634890	B	19930304	AU 9179162	A	19910620	199316	
GB 2251164	B	19940914	GB 9112159	A	19910606	199434	
EP 493920	B1	19950222	EP 91311647	A	19911216	199512	
US 5388200	A	19950207	US 90632015	A	19901221	199512	
DE 69107602	E	19950330	DE 607602	A	19911216	199518	
			EP 91311647	A	19911216		
KR 9603416	B1	19960313	KR 9123786	A	19911221	199911	
CA 2058269	C	20010320	CA 2058269	A	19911220	200120	

Priority Applications (No Type Date): US 90632015 A 19901221
Cited Patents: EP 140128; EP 384419; GB 2180729
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2251164	A		43	G06F-015/72	
EP 493920	A1	E	13	G09G-001/16	
Designated States (Regional): DE FR IT SE					
AU 9179162	A			G06F-003/14	
CA 2058269	A			G06F-003/14	
AU 634890	B			G06F-003/14	Previous Publ. patent AU 9179162
GB 2251164	B		2	G06F-015/72	
EP 493920	B1	E	17	G09G-001/16	
Designated States (Regional): DE FR IT SE					
US 5388200	A		13	G06F-015/62	
DE 69107602	E			G09G-001/16	Based on patent EP 493920
KR 9603416	B1			G06F-003/14	
CA 2058269	C	E		G06F-003/14	

Abstract (Basic): GB 2251164 A

The method writes directly to a **frame buffer** providing signals to an output display in a computer system having a processor running a window management program controlling the furnishing of data to the **frame buffer** , and a source of graphics data for display on the output display. A signal indicating that graphics data from the source is to be displayed is provided. A window is set up for the display of the graphics data from the source under control of the window management program. The source of graphics data is signalled that the window exists and provides information regarding its position and clipping.

A data structure includes a **frame buffer** address set up for its window. Data is clipped for each address to be generated for displaying the graphics data furnished by the source in the window constructed. The graphics data is transferred from the source to addresses in the **frame buffer** pointed to by the addresses in the data structure.

USE/ADVANTAGE - Allows application programs run in secondary format to be written directly to **frame buffer** .

Dwg.2/5

Title Terms: WRITING; METHOD; FRAME; BUFFER; ALLOW; DIRECT; WRITING; FRAME; BUFFER; INTERFERENCE; PROGRAM; CONTROL; WINDOW; MANAGEMENT; PROGRAM
Derwent Class: P85; T01
International Patent Class (Main): G06F-003/14; G06F-015/62; G06F-015/72; G09G-001/16
International Patent Class (Additional): G09F-005/36; G09G-005/14; G09G-005/36
File Segment: EPI; EngPI

7/5/28 (Item 22 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008463384 **Image available**
WPI Acc No: 1990-350384/199047
XRPX Acc No: N90-267644

User interface for information processing system - uses two **icons to indicate status of** program **during execution**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM CORP (IBMC)
Inventor: GREEN E A; MALCOLM J W; NGUYEN H H; ROOSKEN C A
Number of Countries: 008 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 398648	A	19901122	EP 90305221	A	19900515	199047	B
CA 2016397	A	19901115				199106	
BR 9002272	A	19910806				199136	
EP 398648	A3	19920311	EP 90305221	A	19900515	199326	
KR 9305803	B1	19930625	KR 906826	A	19900514	199425	
US 5333256	A	19940726	US 89352800	A	19890515	199429	
			US 91683127	A	19910409		
			US 92865788	A	19920407		
CA 2016397	C	19940705	CA 2016397	A	19900509	199431	

Priority Applications (No Type Date): US 89352800 A 19890515; US 91683127 A 19910409; US 92865788 A 19920407
Cited Patents: NoSR.Pub; 5.Jnl.Ref; JP 62063333
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 398648	A				
Designated States (Regional): DE FR GB IT					
US 5333256	A		13	G06F-015/62	Cont of application US 89352800 Cont of application US 91683127
KR 9305803	B1			G06F-003/023	
CA 2016397	C			G06F-011/32	

Abstract (Basic): EP 398648 A

The device is a user interface, for an information processing system, that indicates, via icons, the status of a program while it is being executed. The program, which is being executed, is represented by the display of an icon. If during the execution, a virtual **display buffer** , associated with the **program** , is updated, a second icon is displayed to indicate to the system user that a change in the status of the program has occurred.

USE - For e.g. multitasking information processing system. (14pp

Dwg.No.7/10

Title Terms: USER; INTERFACE; INFORMATION; PROCESS; SYSTEM; TWO; INDICATE; STATUS; PROGRAM; EXECUTE
Derwent Class: T01

International Patent Class (Main): G06F-003/023; G06F-011/32; G06F-015/62
International Patent Class (Additional): G06F-003/02; G06F-009/00
File Segment: EPI

7/5/29 (Item 23 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008360919 **Image available**
WPI Acc No: 1990-247920/199033
XRPX Acc No: N90-192563
Window system for computer display - has display adaptor with depth buffer and interactive display with over lapping screen windows and window manager
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM CORP (IBMC)
Inventor: LOUCKS L K; SIMPSON R O
Number of Countries: 015 Number of Patents: 009
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 381892	A	19900816	EP 89312524	A	19891130	199033	B
AU 9047636	A	19900809				199039	
CN 1044718	A	19900815				199118	
US 5241656	A	19930831	US 89306125	A	19890206	199336	
			US 91807798	A	19911213		
CA 1323450	C	19931019	CA 608710	A	19890818	199348	
KR 9206746	B1	19920817	KR 90662	A	19900120	199405	
EP 381892	B1	19950405	EP 89312524	A	19891130	199518	
DE 68922093	E	19950511	DE 622093	A	19891130	199524	
			EP 89312524	A	19891130		
ES 2070916	T3	19950616	EP 89312524	A	19891130	199531	

Priority Applications (No Type Date): US 89306125 A 19890206; US 91807798 A 19911213
Cited Patents: A3...9113; EP 261463; EP 65423; GB 2180729; NoSR.Pub; WO 8502049; WO 8700329; EP 247827; GB 2162726
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 381892	A				
Designated States (Regional): BE CH DE ES FR GB IT LI NL SE					
US 5241656	A		27	G06F-015/62	Cont of application US 89306125
EP 381892	B1	E	26	G09G-001/00	
Designated States (Regional): BE CH DE ES FR GB IT LI NL SE					
DE 68922093	E			G09G-001/00	Based on patent EP 381892
ES 2070916	T3			G09G-001/00	Based on patent EP 381892
CA 1323450	C			G06F-015/62	
KR 9206746	B1			G06F-015/62	

Abstract (Basic): EP 381892 A
The computer system has a **display adapter** , a refresh **buffer** and an interactive display terminal with a screen display on which are formed several overlapping windows. A depth **buffer** is added to the **display adapter** to provide assistance to the software-based window manager in the central processing unit (CPU).
The window manager is programmed to monitor the current depth position of each of the windows. The depth buffer includes an array which stores the depth values of the subject matter associated with each of the windows on the screen. (23pp Dwg.No.8/12
Title Terms: WINDOW; SYSTEM; COMPUTER; DISPLAY; DISPLAY; ADAPT; DEPTH; BUFFER; INTERACT; DISPLAY; LAP; SCREEN; WINDOW; WINDOW; MANAGE
Derwent Class: P85; T01; T04
International Patent Class (Main): G06F-015/62
International Patent Class (Additional): G06F-003/14; G06F-009/44; G06F-009/46; G09G-001/00
File Segment: EPI; EngPI

7/5/30 (Item 24 from file: 350)

DIALOG(R)File 350:Derwent WPI

008137392 **Image available**
WPI Acc No: 1990-024393/199004
XRPX Acc No: N90-018660
Multiplane image mixing for computer graphics display windows - using multiple memory buffers either for bit encoding or multiplane lateral bit encoding, designating display priority among buffers
Patent Assignee: IBM CORP (IBMC)
Inventor: DINICOLA P D; DUMAS F N; LAWLESS J J
Number of Countries: 004 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 352012	A	19900124	EP 89307077	A	19890712	199004	B
US 4951229	A	19900821	US 88223138	A	19880722	199036	

Priority Applications (No Type Date): US 88223138 A 19880722
Cited Patents: A3...9024; EP 139093; No-SR.Pub; US 4317114; US 4509043; US 4616336; US 4757309
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 352012	A	E	8		

Designated States (Regional): DE FR GB

Abstract (Basic): EP 352012 A

Multiple memory buffers (24, 26, 28, 30) are used to produce images through bit plane encoding or to combine display images through the use of lateral bit encoding. Each memory buffer can be independently associated with a display monitor (50) or the images can be mixed through the use of hardware or **software** to create a composite **display** . Separate buffers can be used to create an animated display.

The image mixer (32) combines images so taht portions of the highest priority image are always displayed, also objects may be displayed with apparent motion. Alternatively memory buffers may be linked in a manner which allows smooth scrolling through the linked image as if it was one large page.

USE/ADVANTAGE - Colour image **display** mixing. Supports **several independent applications** or multiple image mixing.

1/7

Title Terms: MULTIPLANAR; IMAGE; MIX; COMPUTER; GRAPHIC; DISPLAY; WINDOW; MULTIPLE; MEMORY; BUFFER; BIT; ENCODE; MULTIPLANAR; LATERAL; BIT; ENCODE; DESIGNATED; DISPLAY; PRIORITY; BUFFER
Derwent Class: P85; T01; T04
International Patent Class (Additional): G06F-015/72; G09G-001/00
File Segment: EPI; EngPI

7/5/31 (Item 25 from file: 350)
DIALOG(R)File 350:Derwent WPIX

007486815
WPI Acc No: 1988-120748/198818
XRPX Acc No: N88-091662
Raster scan video system - uses frame buffer **coupled to switching matrix to generate drive signals**
Patent Assignee: SILICONGRAPHICS INC (SILI-N)
Inventor: HANNAH M R
Number of Countries: 004 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 3736195	A	19880428	DE 3736195	A	19871026	198818	B
GB 2198319	A	19880608	GB 8724844	A	19871023	198823	
US 4772881	A	19880920	US 86923177	A	19861027	198840	
GB 2198319	B	19910529				199122	
CA 1290870	C	19911015				199150	
DE 3736195	C2	19971127	DE 3736195	A	19871026	199751	

Priority Applications (No Type Date): US 86923177 A 19861027
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3736195	A		5		
US 4772881	A		4		
DE 3736195	C2		4	G09G-001/28	

Abstract (Basic): DE 3736195 A

A raster scan video display system has a buffer to store a data frame and this is scanned in order to control a CRT on a point-by-point basis for each pixel. For each pixel a total of 24 colour data bits and 2 colour mode bits are stored.

The 24 bits are transmitted over a bus to a switching matrix. Connections between the rows and columns are provided in a programming operation. The selected outputs are transmitted by a multiplexer to the monitor.

ADVANTAGE - Allows coloured display without requiring large memory capacity.

0/1

Title Terms: RASTER; SCAN; VIDEO; SYSTEM; FRAME; BUFFER; COUPLE; SWITCH; MATRIX; GENERATE; DRIVE; SIGNAL
Derwent Class: P85; T04
International Patent Class (Main): G09G-001/28
International Patent Class (Additional): G09G-001/02
File Segment: EPI; EngPI

7/5/32 (Item 26 from file: 350)
DIALOG(R)File 350:Derwent WPIX

004186741
WPI Acc No: 1985-013621/198503
XRPX Acc No: N85-009686

Two-dimensional memory mapping and read-out system - stores array of horizontal line data bits in different sequence from bits stored on vertical lines of raster scan

Patent Assignee: IBM CORP (IBMC)
Inventor: OSTAPKO D L
Number of Countries: 004 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 130340	A	19850109	EP 84105759	A	19840521	198503	B
US 4559611	A	19851217	US 83509697	A	19830630	198602	
EP 130340	B	19900912				199037	
DE 3483181	G	19901018				199043	

Priority Applications (No Type Date): US 83509697 A 19830630
Cited Patents: A3...8747; EP 38411; EP 47842; No-SR.Pub; US 4090174
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 130340	A	E	25		
	Designated States (Regional): DE FR GB				
EP 130340	B				
	Designated States (Regional): DE FR GB				

Abstract (Basic): EP 130340 A

The address translation operates on the two least significant bits (WL) of the word address and the two most significant bits of the bit address (BH). A four bit chip number from the chip number store is added (ADDER) with the four bits formed by catenating the words and bit address bits (WL,BH). The remaining six bits of the respective word, i.e. the bit address are applied to a respective incrementer.

The address translation function in the horizontal mode is given by : bit-address (5,4,3,2,1,0) = integer of X16 or X(9,8,7,6,5,4); bit address (7,6) = 4 modulo Y or Y (1,0); word address (1,0) = 4 modulo integer of Y/4 or Y(3,2); word address (7,6,5,4,3,2) = integer of Y/16

or Y (9,8,7,6,5,4). A specified address translation function is applied in the vertical mode.

USE - For display system in which mapping from **frame buffer** to high-function raster-scan display screen is enhanced for writing horizontal or vertical bit strings.

3/10

Title Terms: TWO-DIMENSIONAL; MEMORY; MAP; READ-OUT; SYSTEM; STORAGE; ARRAY ; HORIZONTAL; LINE; DATA; BIT; SEQUENCE; BIT; STORAGE; VERTICAL; LINE; RASTER; SCAN

Index Terms/Additional Words: CHIP

Derwent Class: T01

International Patent Class (Additional): G06F-012/02; G06F-013/00; G11C-008/00

File Segment: EPI

File 348:EUROPEAN PATENTS 1[illegible]-2003/Oct W03
(c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20031030,UT=20031023
(c) 2003 WIPO/Univentio

Set	Items	Description
S1	13062	(VIDEO OR GRAPHICS OR DISPLAY OR VGA OR SVGA OR 3D)(1W)(CARD? ? OR BOARD? ? OR CONTROLLER? ? OR ADAPTER? ? OR ACCELERATOR? ?)
S2	7158	S1(5N)(BUFFER? ? OR MEMORY OR MEMORIES OR RAM) OR DISPLAY(-)BUFFER? ? OR FRAME()BUFFER? ? OR FRAMEBUFFER? ?
S3	957148	INTERFACE? ? OR PANE? ? OR GUI? ? OR LAYOUT? ? OR SCREEN? ? OR MENU? ? OR TOOLBAR? ? OR TOOL()BAR? ? OR DISPLAY? OR VIEW???
S4	110495	S3(10N)(APPLICATION? ? OR PROGRAM? ? OR SOFTWARE)
S5	281798	(DIFFERENT OR SEPARATE OR ANOTHER OR OTHER OR MULTIPLE OR MULTIPLICITY OR PLURAL OR DUAL? OR SECOND OR 2ND OR TWO OR VARIOUS OR ASSORT? OR SEVERAL OR INDEPENDENT)(5N)(APPLICATION? ? OR PROGRAM? ? OR SOFTWARE)
S6	1000	S2(S)S4
S7	255	S2(S)S4(S)S5
S8	117	S7 AND IC=G06F
S9	22	S1/TI,AB,CM AND S8
S10	38	S2/TI,AB,CM AND S8
S11	41	S9:S10

11/5,K/6 (Item 6 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00999239

System and method for invalidating and updating individual gart (graphic address remapping table) entries for accelerated graphics port transaction requests

System und Verfahren zum Entwerten und zur Aktualisierung von Eintragungen in einer Gart (Tabelle fur graphische Adresswiederabbildung) fur beschleunigte Transaktionsanforderungen fur einen graphischen Port

Systeme et procede pour invalider et mettre a jour des entrees individuelles de gart (table de remappage de l'adressage graphique) pour accelerer les requetes de transaction pour un port graphique

PATENT ASSIGNEE:
Compaq Computer Corporation, (687792), 20555 S.H. 249, Houston Texas 77070, (US), (Applicant designated States: all)
INVENTOR:
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Elliott, Robert C., 13222 Champions Centre Drive, Houston, Texas 77069, (US)
LEGAL REPRESENTATIVE:
Brunner, Michael John et al (28871), GILL JENNINGS & EVERY Broadgate House 7 Eldon Street, London EC2M 7LH, (GB)

PATENT (CC, No, Kind, Date): EP 902355 A2 990317 (Basic)
EP 902355 A3 000112
APPLICATION (CC, No, Date): EP 98307097 980903;
PRIORITY (CC, No, Date): US 926421 970909
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: **G06F-003/14**

ABSTRACT EP 902355 A2

A computer system having a core logic chipset that functions as a bridge between an Accelerated Graphics Port ("AGP") bus device such as a **graphics controller** , and a host processor and computer system memory wherein a Graphics Address Remapping Table ("GART table") is used by the core logic chipset to remap virtual **memory** addresses used by the AGP **graphics controller** into physical **memory** addresses that reside in the computer system memory. The GART table enables the AGP **graphics controller** to work in contiguous virtual **memory** address space, but actually use non-contiguous blocks or pages of physical system memory to store textures, command lists and the like. The GART table is made up of a plurality of entries, each entry comprising an address pointer to a base address of a page of graphics data in memory, and feature flags that may be used to customize the associated page. The core logic chipset may cache a subset of the most recently used GART table entries to increase AGP performance when performing the address translation. A GART cache entry control register is used by an application programming interface, such as a GART miniport driver, to indicate to the core logic chipset that an individual GART table entry in the chipset cache should be invalidated and/or updated. The core logic chipset may then perform the required invalidate and/or update operation on the individual GART table entry without having to flush or otherwise disturb the other still relevant GART table entries stored in the cache.

ABSTRACT WORD COUNT: 251
NOTE:
Figure number on first page: 2

LEGAL STATUS (Type, Pub Date, Kind, Text):
Withdrawal: 010411 A2 Date application deemed withdrawn: 20000713
Search Report: 20000112 A3 Separate publication of the search report
Application: 990317 A2 Published application (A1with Search Report ;A2without Search Report)
Change: 20000119 A2 International Patent Classification changed: 19991126
LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9911	3894
SPEC A	(English)	9911	19634
Total word count - document A			23528
Total word count - document B			0
Total word count - documents A + B			23528

INTERNATIONAL PATENT CLASS: **G06F-003/14**

...ABSTRACT functions as a bridge between an Accelerated Graphics Port ("AGP") bus device such as a **graphics controller** , and a host processor and computer system memory wherein a Graphics Address Remapping Table ("GART table") is used by the core logic chipset to remap virtual **memory** addresses used by the AGP **graphics controller** into physical **memory** addresses that reside in the computer system memory. The GART table enables the AGP **graphics controller** to work in contiguous virtual **memory** address space, but actually use non-contiguous blocks or pages of physical system memory to...

...SPECIFICATION by the core logic driver software, i.e. the aforementioned GART miniport driver, or any **other software program** or **application** specific **interface** ("API") **program** . The GART table is used by the computer system core logic to remap the virtual...

...the AGP graphics controller to physical addresses of pages that reside in the computer system **memory** (translate addresses). Thus, the AGP **graphics controller** can work in contiguous virtual address space, but use non-contiguous pages of physical system...

...CLAIMS the video display data.
6. The computer system of claim 5, further comprising a local **frame buffer** memory connected to said graphics processor, said local **frame buffer** storing a second portion of the graphics data from said system memory.
7. The computer...

...of pages of graphics data.
8. The computer system of claim 6, wherein said local **frame buffer** memory stores the second portion of the graphics data in contiguous virtual address space and...

...said cache memory and accesses the second portion of the graphics data from said local **frame buffer** memory.
9. The computer system of claim 8, wherein said graphics processor reads the first...upon the graphics data.
33. The computer system of claim 32, further comprising a local **frame buffer** memory coupled to said graphics processor, wherein said graphics processor combines video data stored in said local **frame buffer** memory with the associated ones of the plurality of pages of graphics data read from...

11/5,K/7 (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00787298
Field synchronization of independent frame buffers
Feldsynchronisation von unabhangigen Bildspeichern
Synchronisation d'une zone de trames independantes
PATENT ASSIGNEE:
SUN MICROSYSTEMS, INC., (1392730), 2550 Garcia Avenue, Mountain View, CA 94043, (US), (applicant designated states: DE;FR;GB;NL;SE)
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LEGAL REPRESENTATIVE:
Johnson, Terence Leslie (42961), Edward Evans & Co. Chancery House 53-64 Chancery Lane, London WC2A 1SD, (GB)
PATENT (CC, No, Kind, Date): EP 734011 A2 960925 (Basic)
EP 734011 A3 990120
APPLICATION (CC, No, Date): EP 96301747 960314;
PRIORITY (CC, No, Date): US 408268 950321
DESIGNATED STATES: DE; FR; GB; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-003/14** ; G09G-005/06; G09G-005/08; G09G-005/12; G09G-005/18

ABSTRACT EP 734011 A2
A method and apparatus for synchronizing the vertical blanking of multiple **frame buffers** which may exist on the same computer or **separate** computers for certain **applications** including stereo **display** , virtual reality and video recording, which require such synchronization. To obtain the required synchronization one **frame buffer** is designation as the master. It provides a signal called FIELD that changes state (0 to 1 or 1 to 0) at the start of every vertical sync event on the master **frame buffer** . All other **frame buffers** are set to be slaves. Their timing generators sample the master's FIELD signal. When they detect the master's FIELD signal changing state, they set their own internal timing to match to thereby achieve frame synchronization. (see image in original document)
ABSTRACT WORD COUNT: 143

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	960925 A2	Published application (Alwith Search Report ;A2without Search Report)
Change:	990113 A2	International patent classification (change)
Change:	990113 A2	Obligatory supplementary classification (change)
Search Report:	990120 A3	Separate publication of the European or International search report
Examination:	990825 A2	Date of request for examination: 19990628

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	924
SPEC A	(English)	EPAB96	6106
Total word count - document A			7030
Total word count - document B			0
Total word count - documents A + B			7030

Field synchronization of independent frame buffers
INTERNATIONAL PATENT CLASS: **G06F-003/14** ...

...ABSTRACT A2
A method and apparatus for synchronizing the vertical blanking of multiple **frame buffers** which may exist on the same computer or **separate** computers for certain **applications** including stereo **display** , virtual reality and video recording, which require such synchronization. To obtain the required synchronization one **frame buffer** is designation as the master. It provides a signal called FIELD that changes state (0...

...or 1 to 0) at the start of every vertical sync event on the master **frame buffer** . All other **frame buffers** are set to be slaves. Their timing generators sample the master's FIELD signal. When...

...CLAIMS An apparatus for synchronizing a vertical blanking signal for each of a plurality of independent **frame buffers** comprising:
a plurality of RAMDACs, each for coupling to a corresponding rendering controller and a...

...A method for synchronizing a vertical blanking signal for each of a plurality of independent **frame buffers** comprising the steps of:

a) designating one of a plurality of RAMDACs, each for coupling...

...a slave;
b) generating a vertical blanking signal for each of said plurality of independent **frame buffers** ;
c) synchronizing the video signals providing to the display monitor coupled to each of said...

11/5,K/8 (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00724718
Method for allocating high memory in a personal computer.
Zuordnung von hohem Speicher in Personal-Computern.
Methode d'attribution de memoire haute dans un ordinateur personnel.
PATENT ASSIGNEE:
Compaq Computer Corporation, (687792), 20555 S.H. 249, Houston Texas 77070, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;IE;IT;LI;NL;SE)
INVENTOR:
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LEGAL REPRESENTATIVE:
Brunner, Michael John et al (28871), GILL JENNINGS & EVERY Broadgate House 7 Eldon Street, London EC2M 7LH, (GB)
PATENT (CC, No, Kind, Date): EP 684562 A1 951129 (Basic)
APPLICATION (CC, No, Date): EP 95303080 950505;
PRIORITY (CC, No, Date): US 243364 940516
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IE; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-012/10**

ABSTRACT EP 684562 A1
A video driver in a computer system is used to map a large video **frame buffer** into the logical address space above physical memory while the computer system is operating in WINDOWS STANDARD mode. The requirements of the necessary address space for the **frame buffer** (i.e., the size of the **frame buffer**), and the size of physical memory are determined. If there is sufficient address space above physical memory in which to map the **frame buffer** , the video driver attempts to map the **frame buffer** there in that address space. The desired physical and linear addresses for the **frame buffer** are determined. If the video driver detects that MICROSOFT WINDOWS is operating in standard mode, it searches memory to find the page directory that MICROSOFT WINDOWS created. Once the page directory is found, the driver creates a new page table to map the **frame buffer** into the desired linear address range and adds a new entry to the existing page directory to point to the new page table. (see image in original document)
ABSTRACT WORD COUNT: 175

LEGAL STATUS (Type, Pub Date, Kind, Text):
Withdrawal: 000906 A1 Date application deemed withdrawn: 20000313
Application: 951129 A1 Published application (A1with Search Report ;A2without Search Report)
Examination: 960710 A1 Date of filing of request for examination: 960510
Examination: 991013 A1 Date of dispatch of the first examination report: 19990831
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	679
SPEC A	(English)	EPAB95	3340
Total word count - document A			4019
Total word count - document B			0

Total word count - documents A + B 4019

INTERNATIONAL PATENT CLASS: **G06F-012/10**

...ABSTRACT A1

A video driver in a computer system is used to map a large video **frame buffer** into the logical address space above physical memory while the computer system is operating in WINDOWS STANDARD mode. The requirements of the necessary address space for the **frame buffer** (i.e., the size of the **frame buffer**), and the size of physical memory are determined. If there is sufficient address space above physical memory in which to map the **frame buffer** , the video driver attempts to map the **frame buffer** there in that address space. The desired physical and linear addresses for the **frame buffer** are determined. If the video driver detects that MICROSOFT WINDOWS is operating in standard mode...

...the page directory is found, the driver creates a new page table to map the **frame buffer** into the desired linear address range and adds a new entry to the existing page...

...SPECIFICATION the base address.

One preferred embodiment of the present invention is to use the video **display** driver **software** to allocate high memory to **frame buffer** 48. Figures 5-7 are flow diagrams illustrating a preferred embodiment of such a video...

...and certain page tables in memory 24 or is using page tables created by a **separate** memory management **program** . Step 87 determines the hardware factors which are necessary to place the **frame buffer** in high memory, such as the amount of physical memory present in the computer system, the size of the **frame buffer** (e.g., 512k, 1M or 2M), and optionally, whether there are any other contentions for...

...address space located between 16M and the highest physical memory address. The size of the **frame buffer** can be obtained from the **video controller** 30, and the physical **memory** range can be obtained from CMOS which stores the ROM BIOS configuration data. In step...

...the video driver software determines which physical addresses video controller 30 will be decoding for **frame buffer** 48, and also to which linear addresses these physical addresses should correspond. Preferably, the linear...

...physical memory and 16M) chosen should be high, so as to avoid accidental conflicts with **other software** or devices that may use high linear addresses in the memory address space. Also, the lowest physical address decoded by **video controller** 30 for **frame buffer** 48 should preferably be just above the highest address of physically installed memory, while the...

...CLAIMS A1

1. A method of allocating memory address space in a computer system to a **frame buffer** comprising the steps of:

determining a desired memory space for the **frame buffer** responsive to the physical memory and the address limitations of the computer system;

detecting the...

...s memory address space to be below the a desired address space for locating the **frame buffer** ;

modifying the page directory to point to one or more page tables; and

creating page...

...in said 4K address space to zero.

9. A computer system comprising:

a display;

a **video controller** coupled to said display;

a processor for executing a video control routine for:
determining a desired memory space for the **frame buffer** responsive to the physical memory and the address limitations of the computer system:
detecting the...

...s memory address space to be below the a desired address space for locating the **frame buffer** ;
modifying the page directory to point to one or more page tables; and
creating page...

11/5,K/9 (Item 9 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00699968
FRAME BUFFER **SYSTEM DESIGNED FOR WINDOWING OPERATIONS**
FUR FENSTERUMGEBUNGSOPERATIONEN ENTWORFENES RASTERPUFFERSYSTEM
DISPOSITIF DE TAMPON D'IMAGE DESTINE A UNE EXPLOITATION EN FENETRAGE
PATENT ASSIGNEE:
SUN MICROSYSTEMS, INC., (1392730), 2550 Garcia Avenue, Mountain View, CA 94043, (US), (Proprietor designated states: all)
SAMSUNG SEMICONDUCTOR, INC., (1259583), 3655 North First Street, San Jose, California 95134-1708, (US), (Proprietor designated states: all)
INVENTOR:
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HO, Hai, Duy, 1320 Daniel Court, Milpitas, CA 95035, (US)
SUN, Szu, Cheng, 915 Lane Avenue, No.7, Mountain View, CA 94042, (US)
LEGAL REPRESENTATIVE:
Wombwell, Francis (46021), Potts, Kerr & Co. 15, Hamilton Square, Birkenhead Merseyside CH41 6BR, (GB)
PATENT (CC, No, Kind, Date): EP 677190 A1 951018 (Basic)
EP 677190 A1 960724
EP 677190 B1 030416
WO 95012164 950504
APPLICATION (CC, No, Date): EP 94932066 941027; WO 94US12307 941027
PRIORITY (CC, No, Date): US 145335 931029
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: **G06F-012/06** ; G09G-001/16; G09G-005/02
CITED PATENTS (EP B): EP 225197 A; EP 279693 A; US 4648077 A; US 4807189 A; US 4823302 A; US 5046023 A; US 5170157 A
NOTE:
No A-document published by EPO
LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant:	030416 B1	Granted patent
Application:	950809 A	International application (Art. 158(1))
Application:	951018 A1	Published application (A1with Search Report ;A2without Search Report)
Examination:	951227 A1	Date of filing of request for examination: 951027
Change:	960703 A1	Obligatory supplementary classification (change)
Search Report:	960724 A1	Drawing up of a supplementary European search report: 960606
Examination:	990811 A1	Date of dispatch of the first examination report: 19990623

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200316	1005
CLAIMS B	(German)	200316	932
CLAIMS B	(French)	200316	1212
SPEC B	(English)	200316	7650
Total word count - document A			0
Total word count - document B			10799

...from the latching circuitry.
10. A method for selecting data to be transferred in a **frame buffer** as claimed in claim 9 in which the step of providing control signals comprises:
furnishing...

...to indicate a value of a plurality of pixels stored in a row of the **frame buffer** ;
storing data in a pixel mask register to indicate pixels to which color values are to be written from a color value register for storage in the **frame buffer** ; and wherein providing a plurality of control signals to select for any operation of storing in the **frame buffer** from among the data in the color value register and the plurality of latches further includes storing in the **frame buffer** from among the data in the conductors of the data bus.
12. A method for selecting data to be transferred to a **frame buffer** as claimed in claim 11 in which the step of providing a plurality of control signals to select for any operation of storing in the **frame buffer** from ...latches, and the conductors of the data bus the data to be stored in the **frame buffer** comprises the additional step of:
utilizing the data stored in the pixel mask register as...

...color values are to be written from the color value register for storage in the **frame buffer** .
13. A method for selecting data to be transferred to a **frame buffer** as claimed in claim 11 further comprising causing a plurality of multiplexors to select pixel...

...latches, and the conductors of the data bus the data to be stored in the **frame buffer** .

11/5,K/10 (Item 10 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00682510
OBJECT ORIENTED VIDEO FRAMEWORK SYSTEM
OBJEKTORIENTIERTES VIDEO-RAHMENWERKSYSTEM
SYSTEME CHARPENTE VIDEO ORIENTE-OBJET
PATENT ASSIGNEE:
TALIGENT, INC., (1821850), 10201 N. De Anza Boulevard, Cupertino, CA 95014, (US), (applicant designated states: DE;FR;GB)
INVENTOR:
ZIAS, Jeff, A., 2616 Estella Drive, Santa Clara, CA 95051, (US)
LEGAL REPRESENTATIVE:
Kindermann, Manfred (6412), Patentanwalt, Sperberweg 29, 71032 Boblingen, (DE)
PATENT (CC, No, Kind, Date): EP 701714 A1 960320 (Basic)
EP 701714 B1 980408
WO 9504320 950209
APPLICATION (CC, No, Date): EP 94906033 940105; WO 94US125 940105
PRIORITY (CC, No, Date): US 97507 930727
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: **G06F-009/44**
NOTE:
No A-document published by EPO
LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 950510 A International application (Art. 158(1))
Application: 960320 A1 Published application (A1with Search Report ;A2without Search Report)
Examination: 960320 A1 Date of filing of request for examination: 960118
Examination: 960515 A1 Date of despatch of first examination report: 960401
Change: 970917 A1 Designated Contracting States (change)

Grant: 980408 B1 Granted patent
Oppn None: 990331 B1 No opposition filed
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9815	1527
CLAIMS B	(German)	9815	1143
CLAIMS B	(French)	9815	1915
SPEC B	(English)	9815	7477
Total word count - document A			0
Total word count - document B			12062
Total word count - documents A + B			12062

INTERNATIONAL PATENT CLASS: **G06F-009/44**

...SPECIFICATION implementation or interface contained by video device driver objects. However, this hardware-specific implementation or **interface** may be otherwise provided in hardware or **software** in the system and **separate** subclassing of standard video **display** device functions may not be necessary if non-standard behavior of the video display device is not required. Objects in the video device driver class 110 and **frame buffer** devices driver class 120 and CLUT **frame buffer** video device driver class 130 preferably provide all standard video display device behaviors within the...

...CLAIMS as recited in claim 1, wherein the hierarchy of video device handle subclasses comprises a **frame buffer** video device handle subclass (150) and wherein the hierarchy of video device subclasses comprises a **frame buffer** video device driver subclass (120) having a control data component and control methods for manipulating a video **frame buffer** and a method for instantiating a **frame buffer** video device handle object from the **frame buffer** video device handle subclass.

5. The apparatus as recited in claim 4, wherein the hierarchy (140') of video device handle subclasses comprise a color lookup table **frame buffer** video device handle subclass (160, 520) derived from the **frame buffer** video device handle subclass (150), and wherein the hierarchy (110') of video device subclasses comprises a color lookup table **frame buffer** video device driver subclass (130) derived from the **frame buffer** video device driver subclass (120), the color lookup table **frame buffer** video device driver subclass having a control data component and control methods for manipulating a color lookup table and a method for instantiating a color lookup table **frame buffer** video device handle object from the color lookup table **frame buffer** video device handle subclass.

6. The apparatus as recited in claim 5, further comprising an interrupt handler class (133) and wherein the color look up table **frame buffer** video device driver subclass (130) contains a reference to at least one interrupt handler object...11, wherein the hierarchy of video device handle subclasses loaded in step (b) comprises a **frame buffer** video device handle subclass (150) and wherein the hierarchy of video device subclasses comprises a **frame buffer** video device driversubclass (120) having a control data component and control methods for manipulating a video **frame buffer** and a method for instantiating a **frame buffer** video device handle object from the **frame buffer** video device handle subclass.

15. The method as recited in claim 14, wherein the hierarchy (140') of video device handle subclasses loaded in step (b) comprise a color lookup table **frame buffer** video device handle subclass (160, 520) derived from the **frame buffer** video device handle subclass (150), and wherein the hierarchy (110') of video device subclasses comprises a color lookup table **frame buffer** video device driver subclass (130) derived from the **frame buffer** video device driver subclass (120), the color lookup table **frame buffer** video device driver subclass having a control data component and control methods for manipulating a color lookup table and a method for instantiating a color lookup table **frame buffer** video device handle object from the color lookup table **frame buffer** video device handle subclass.

16. The method as recited in claim 15, further comprising the step of creating an interrupt handler class (133) and wherein the color look up table **frame buffer** video device driver subclass (130) contains a reference to at least one interrupt handler object...

11/5,K/11 (Item 11 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00601723
Method and apparatus for presenting information in a display system using transparent windows
Darstellung von Informationen in einem Anzeigesystem mit transparenten Fenstern
Presentation d'informations dans un systeme d'affichage a fenetres transparentes
PATENT ASSIGNEE:
SUN MICROSYSTEMS, INC., (1392730), 2550 Garcia Avenue, Mountain View, CA 94043, (US), (applicant designated states: DE;FR;GB;NL)
INVENTOR:
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Naughton, Patrick J., 652 Loma Verde Avenue, Palo Alto, California 94306, (US)
Gosling, James Arthur, P.O. Box 620509, Woodside, California 94062, (US)
Liu, John C., 19811 La Mar Drive, Cupertino, California 95014, (US)
LEGAL REPRESENTATIVE:
Wombwell, Francis et al (46021), Potts, Kerr & Co. 15, Hamilton Square, Birkenhead Merseyside L41 6BR, (GB)
PATENT (CC, No, Kind, Date): EP 605945 A1 940713 (Basic)
EP 605945 B1 971229
APPLICATION (CC, No, Date): EP 93308052 931008;
PRIORITY (CC, No, Date): US 991857 921215
DESIGNATED STATES: DE; FR; GB; NL
INTERNATIONAL PATENT CLASS: G09G-005/14; **G06F-003/033**

ABSTRACT EP 605945 A1
A central processing unit (CPU) is provided and is coupled to a display for displaying graphic and other data in multiple overlapping windows. The CPU is further coupled to one or more input devices which permits a user to selectively position a cursor and input and manipulate data within each of the windows on the display. The windows include defined areas having window features such as text, icons and buttons corresponding to functions to be executed by the CPU. **Multiple applications** may be executed concurrently by the CPU such that each **application** is associated with one or more windows. Each **display** element ("pixel") comprising the display is represented by multiple bits in a computer **frame buffer** memory coupled to the CPU. An alpha value (a) is associated with the intensity of each pixel of the display, such that multiple images may be blended in accordance with a predefined formula utilizing the alpha values. By setting the alpha values appropriately, transparency may be accomplished such that data associated with underlying windows may be rendered visible to the user. Effectively, the present invention merges multiple images through alpha "blending" such that several images appear transparently on top of one another. The present invention, through the selective use of alpha blending, permits underlying windows to display data visible to the user through windows which are overlaid above an underlying window. (see image in original document)
ABSTRACT WORD COUNT: 234

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 940713 A1 Published application (A1with Search Report ;A2without Search Report)
Examination: 950315 A1 Date of filing of request for examination: 950113
Change: 960710 A1 Representative (change)

*Assignee: 960710 A1 Applicant (transfer of rights) (change): SUN MICROSYSTEMS, INC. (1392730) 2550 Garcia Avenue Mountain View, CA 94043 (US) (applicant designated states: DE;FR;GB;NL)
*Assignee: 960710 A1 Previous applicant in case of transfer of rights (change): FIRSTPERSON, INC. (1678260) 2550 Garcia Avenue Mountain View, California 94043 (US) (applicant designated states: DE;FR;GB;NL)
Examination: 960731 A1 Date of despatch of first examination report: 960618
Grant: 971229 B1 Granted patent
Oppn None: 981223 B1 No opposition filed
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9712W3	823
CLAIMS B	(German)	9712W3	678
CLAIMS B	(French)	9712W3	953
SPEC B	(English)	9712W3	5524
Total word count - document A			0
Total word count - document B			7978
Total word count - documents A + B			7978

...INTERNATIONAL PATENT CLASS: **G06F-003/033**

...ABSTRACT such as text, icons and buttons corresponding to functions to be executed by the CPU. **Multiple applications** may be executed concurrently by the CPU such that each **application** is associated with one or more windows. Each **display** element ("pixel") comprising the display is represented by multiple bits in a computer **frame buffer** memory coupled to the CPU. An alpha value (a) is associated with the intensity of...

...SPECIFICATION pages 268-270.

SUMMARY OF THE INVENTION
An apparatus and method is disclosed which has **application** for use In computer **display** systems, and in particular, **display** systems having object oriented graphic user interfaces with overlapping windows. A central processing unit (CPU...

...such as text, icons and buttons corresponding to functions to be executed by the CPU. **Multiple applications** may be executed concurrently by the CPU such that each **application** is associated with one or more windows. Each **display** element ("pixel") comprising the display is represented by multiple bits in a computer **frame buffer** memory coupled to the CPU. An alpha value ((alpha)) is associated with the intensity of...allocated such that each memory location is mapped onto the corresponding pixel on the rastor **display** 24. Memory 16 also includes a variety of **other programs** 54 for execution by the CPU 14. For example, a variety of control, **display** , and calculating **programs** implementing the operations and routines described in this Specification may be stored in memory 16...
...as monitor control programs and disk operating systems. Moreover, memory 16 further includes space for **other programs** and spare memory 56 which may be used for a variety of other well known...

11/5,K/12 (Item 12 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00593407
Method and apparatus for rendering primitives with multiple processors.
Verfahren und Gerat zur Ubergabe von Primitiver mit vielfachen Verarbeitungsgeraten.
Methode et appareil pour rendre des primitives avec plusieurs processeurs.

PATENT ASSIGNEE:
INTERNATIONAL BUSINESS MACHINES CORPORATION, (200125), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)
INVENTOR:
Narayanaswami, Chandrasekhar, 11028 Jolliville Road, 350, Austin, Texas 78759, (US)
LEGAL REPRESENTATIVE:
Lettieri, Fabrizio (59683), IBM Semea S.p.A. Direzione Brevetti - MI VIM 900 Casella Postale 37 Via Lecco, 61, I-20059 Vimercate (MI), (IT)
PATENT (CC, No, Kind, Date): EP 600204 A2 940608 (Basic)
EP 600204 A3 940727
APPLICATION (CC, No, Date): EP 93116846 931019;
PRIORITY (CC, No, Date): US 982809 921130
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: **G06F-015/72**
ABSTRACT EP 600204 A2

A method for rendering, with multiple processors, a primitive having multiple spans including the steps of assigning at least one span to each processor, each processor calculating endpoints within the primitive for each assigned span, and displaying the primitive. In addition, an apparatus for implementing the method is described.

ABSTRACT WORD COUNT: 51

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	940608 A2	Published application (A1with Search Report ;A2without Search Report)
Search Report:	940727 A3	Separate publication of the European or International search report
Change:	940907 A2	Representative (change)
Examination:	941123 A2	Date of filing of request for examination: 940927
Change:	951227 A2	Representative (change)
Withdrawal:	961016 A2	Date on which the European patent application was withdrawn: 960826
*Assignee:	970205 A2	Applicant (transfer of rights) (change): International Business Machines Corporation (200120) Old Orchard Road Armonk, N.Y. 10504 (US) (applicant designated states: DE;FR;GB)

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	288
SPEC A	(English)	EPABF2	5367
Total word count - document A			5655
Total word count - document B			0
Total word count - documents A + B			5655

INTERNATIONAL PATENT CLASS: **G06F-015/72**

...SPECIFICATION The graphics adapter then executes those instructions with graphics adapter processors 220 coupled to a **graphics adapter memory** 230. In the preferred embodiment, the graphics processors include multiple interconnected processors as described below...

...Fig. 3. The graphics processors in the graphics adapter then execute those instructions and updates **frame buffer** (s) 240 and video look up table (LUT) 245 based on those instructions. Graphic processors be rendered. **Frame buffer** (s) 240 includes an index value for every pixel to be displayed on the graphics output device. The index value read from the **frame buffer** is used to read LUT 245 for the actual color to be displayed. A DAC...

...packages such as Silicon Graphic's GL, IBM's graPHIGS, MIT's PEX, etc. This **software** provides the primary functions of **two** dimensional or three dimensional graphics. Graphics applications 330 and 332 are coupled to graphics **application** API (**application program interface**) 340 and 342, respectively. The API provides many of the computationally intensive tasks for the graphics **application** and provides an **interface**

between the **application software** and **software** closer to the graphics hardware such as a device driver for the graphics adapter. For example, API 340 and 342 may communicate with a GAI (graphics **application interface**) 350 and 352, respectively. The GAI provides an **interface** between the **application** API and a graphics adapter device driver 370. In some graphics systems, the API also...

...and 362 may use the same code that is being executed twice simultaneously, such as **two** executions of a **program** in **two separate** windows. The PID is used to distinguish the separate executions of the same code.
The...
...switching is used when the adapter microcode is to receive an instruction from a graphics **application** that utilizes **different** attributes than the adapted microcode is currently using. The context switch is typically initiated by the device driver which recognizes the attribute changes.
Blocks 300-340 are **software** code layers that are typically **independent** of the type of graphics adapter being utilized. Blocks 350-380 are software code layers...

...the surface of an object. The user then provides a perspective in a window to **view** the model, thereby defining the desired image. The **application software** then starts the rendering of the image from the model by sending the drawing primitives...

...pixels from the perspective given by the user. The pixels are then loaded into the **frame buffer** , often with the use of a depth buffer in the case of a ...the number of drawing primitives, variables, and pixels involved. The resulting image stored in the **frame buffer** and displayed on the graphics display typically does not carry the original information such as...

...utilized in many locations such as the adapter microcode which is close to the adapter **frame buffer** . This approach would also be relatively quick and fairly easy to implement. In addition, the...

...traversal technique in substep 420A, the spans are then interpolated in substep 420B, and the **frame buffer** is updated in substep 420C. This process is generically called scan conversion. As will be...

...processors in alternative embodiments. Processors 226A-226N then forward the interpolated pixels on to the **frame buffer** on data lines 240A-240N.
Fig. 5 is a flowchart detailing the sorting and slope...

...CLAIMS method of Claim 1, 2, 3 or 4 further comprising a step of
updating a **frame buffer** with interpolated values.
6. An apparatus for rendering a primitive having a plurality of spans...

...The apparatus of Claim 6, 7, 8 or 9 further comprising means for
updating a **frame buffer** with interpolated values.
11. The apparatus of Claim 6, 7, 8, 9 or 10 wherein...

11/5,K/13 (Item 13 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00541622
Method and apparatus for providing shared off-screen memory
Verfahren und Vorrichtung zur Verwaltung eines gemeinsam genutzten Speichers ausserhalb des Bildschirms
Methode et dispositif pour gerer une memoire hors-ecran partagee
PATENT ASSIGNEE:
SUN MICROSYSTEMS, INC., (1392730), 2550 Garcia Avenue, Mountain View, CA 94043, (US), (applicant designated states: DE;FR;GB;IT;NL)
INVENTOR:

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LEGAL REPRESENTATIVE:
Wombwell, Francis (46021), Potts, Kerr & Co. 15, Hamilton Square, Birkenhead Merseyside L41 6BR, (GB)
PATENT (CC, No, Kind, Date): EP 521684 A2 930107 (Basic)
EP 521684 A3 930428
EP 521684 B1 960605
APPLICATION (CC, No, Date): EP 92305994 920629;
PRIORITY (CC, No, Date): US 726304 910705
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: **G06F-003/14** ; **G06F-009/46** ; G09G-005/14
CITED PATENTS (EP A): US 5016161 A
CITED REFERENCES (EP A):
HEWLETT-PACKARD JOURNAL vol. 40, no. 6, December 1989, PALO ALTO US pages 20 - 32 J. BOYTON ET AL. 'Sharing Access to Display Resources in the Starbase/X11 Merge System';

ABSTRACT EP 521684 A2
A method for allowing direct graphics access to backup storage areas in **frame buffer** memory used for retained windows and controlled by a **graphics accelerator** which includes the steps of establishing a shared memory file in system memory for the backup storage area indicating that the retained windows area initially exists in excess **frame buffer** memory, the shared memory file having storage to indicate the use of the shared area by a process; generating a page fault whenever access to the **graphics accelerator** is attempted and the state of another process is stored on the **graphics accelerator** ; and calling a device driver in response to the page fault to switch the context stored on the **graphics accelerator** to that of the process attempting the access. (see image in original document)
ABSTRACT WORD COUNT: 132

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	930107 A2	Published application (A1with Search Report ;A2without Search Report)
Search Report:	930428 A3	Separate publication of the European or International search report
Examination:	931124 A2	Date of filing of request for examination: 930929
Examination:	950913 A2	Date of despatch of first examination report: 950727
Grant:	960605 B1	Granted patent
Oppn None:	970528 B1	No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB96	999
CLAIMS B	(German)	EPAB96	962
CLAIMS B	(French)	EPAB96	1123
SPEC B	(English)	EPAB96	7202
Total word count - document A			0
Total word count - document B			10286
Total word count - documents A + B			10286

INTERNATIONAL PATENT CLASS: **G06F-003/14** ...

... **G06F-009/46**

...ABSTRACT A2
A method for allowing direct graphics access to backup storage areas in **frame buffer** memory used for retained windows and controlled by a **graphics accelerator** which includes the steps of establishing a shared memory file in system memory for the backup storage area indicating that the retained windows area initially exists in excess **frame buffer** memory, the shared memory file having storage to indicate the use of the shared area by a process; generating a page fault whenever access to the

address space of each program having access to the **graphics accelerator** ,

means for generating a page fault whenever access to the **graphics accelerator** is attempted and the state of another process is stored on the **graphics accelerator** , and

means for responding to the page fault created when the state of another process is stored on the **graphics accelerator** to switch the context stored on the **graphics accelerator** to that of the process attempting the access once the **graphics accelerator** becomes free.

4. A system for allowing direct graphics access to backup storage areas in **frame buffer** memory used for retained windows and controlled by a **graphics accelerator** as claimed in Claim 3 in which the means for generating a page fault whenever access to the **graphics accelerator** is attempted and the state of another process is stored on the **graphics accelerator** includes means for locking the first and second shared memory files.
5. A system for allowing direct graphics access to backup storage areas in **frame buffer** memory used for retained windows and controlled by a **graphics accelerator** as claimed in Claim 3 in which the means for responding to the page fault created when the state of another process is stored on the **graphics accelerator** to switch the context stored on the **graphics accelerator** to that of the process attempting the access once the **graphics accelerator** becomes free comprises means for calling a device driver for the **graphics accelerator** to switch the context.
6. A system for allowing direct graphics access to backup storage areas in **frame buffer** memory used for retained windows and controlled by a **graphics accelerator** as claimed in Claim 3 in which the first shared memory file in system memory...

...the window.

7. A system for allowing direct graphics access to backup storage areas in **frame buffer** memory used for retained windows and controlled by a **graphics accelerator** as claimed in Claim 3 in which the means for establishing a second shared memory...

...a window.

8. A system for allowing direct graphics access to backup storage areas in **frame buffer** memory used for retained windows and controlled by a **graphics accelerator** as claimed in Claim 3 in which the means for responding to the page fault created when the state of another process is stored on the **graphics accelerator** to switch the context stored on the **graphics accelerator** to that of the process attempting the access once the **graphics accelerator** becomes free comprises means for calling the device driver for the **graphics accelerator** to switch the context.
9. A system for allowing direct graphics access to backup storage areas in **frame buffer** memory used for retained windows and controlled by a **graphics accelerator** as claimed in Claim 3 in which the means for mapping each of the shared memory files to the virtual address space of each program having access to the **graphics accelerator** comprises a **memory** management unit. ...

11/5,K/15 (Item 15 from file: 348)

00484189

Multimedia interface and method for computer system.
Multimedia-Schnittstelle und Verfahren fur Rechnersystem.
Interface multi-support et procede pour systeme informatique.

PATENT ASSIGNEE:
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LEGAL REPRESENTATIVE:
Jackson, David Spence et al (32231), REDDIE & GROSE 16, Theobalds Road, London, WC1X 8PL, (GB)
PATENT (CC, No, Kind, Date): EP 460867 A2 911211 (Basic)
EP 460867 A3 920610
APPLICATION (CC, No, Date): EP 91304877 910530;
PRIORITY (CC, No, Date): US 532596 900604
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-015/40**
CITED PATENTS (EP A): WO 9001195 A; WO 9001195 A; WO 9001195 A; WO 8905023 A
CITED REFERENCES (EP A):
IEEE TRANSACTIONS ON ENERGY CONVERSION. vol. 3, no. 1, March 1988, NEW YORK, US pages 71 - 77; C.G. KOCH ET AL.: 'INTELLIGENT USER INTERFACE FOR EXPERT SYSTEMS APPLIED TO POWER PLANT MAINTENANCE AND TROUBLESHOOTING'
IDEM
IDEM
IEEE COMPUTER SOCIETY OFFICE AUTOMATION SYMPOSIUM 27 April 1987, GAITHERSBURG, MD, US pages 180 - 189; D. WOELK ET AL.: 'MULTIMEDIA APPLICATIONS AND DATABASE REQUIREMENTS'
MICROPROCESSING AND MICROPROGRAMMING. vol. 21, no. 1-5, August 1987, AMSTERDAM, NL pages 119 - 126; C. MILENKOVIC ET AL.: 'PC-BASED MULTIMEDIA MESSAGING SYSTEM';

ABSTRACT EP 460867 A2
A multimedia interface presents information and receives user commands and data for a computer system. The multimedia interface operates in parallel with another application software module, such as an expert system. To add multimedia features to the application software module, the module is modified so as to generate multimedia commands at the same time as it displays text on a text monitor (58).The multimedia commands, which are held in a queue, provide additional information in the form of video images and generated speech corresponding to the displayed text. In addition, the multimedia commands are split into at least two sets: one set which is dispatched to the user substantially immediately after displaying the corresponding text, and one set which is dispatched upon request by the user. In the preferred embodiment, the multimedia interface presents information to the user through text, graphics, video, sound, speech production, and printed output. User inputs are made through a keyboard (55) and voice recognition (186). In one preferred embodiment two data processing units (165, 230) are used: one (165) for an expert system module and one (230) for a video output processing module. Each module includes its own flat VGA display (58, 86). The video module includes a digital **video controller** (180) which enables it to display drawings, photographs, still and animated graphics, video stills, full-motion video and motion video with graphic overlays. An optional satellite station (224) facilitates use of the system in environments where it is inconvenient or impossible to bring the complete system. (see image in original document)
ABSTRACT WORD COUNT: 258

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 911211 A2 Published application (A1with Search Report ;A2without Search Report)
Search Report: 920610 A3 Separate publication of the European or International search report

Change: 921119 A2 Inventor (change)
Examination: 921125 A2 Date of filing of request for examination: 920924
Withdrawal: 930811 A2 Date on which the European patent application was withdrawn: 930614
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1270
SPEC A	(English)	EPABF1	12094
Total word count - document A			13364
Total word count - document B			0
Total word count - documents A + B			13364

INTERNATIONAL PATENT CLASS: **G06F-015/40**

...ABSTRACT module includes its own flat VGA display (58, 86). The video module includes a digital **video controller** (180) which enables it to display drawings, photographs, still and animated graphics, video stills, full...

...CLAIMS said second data processing unit, for storing a multiplicity of digitized video images;
a digital **video controller** , coupled to said second data processing unit and to said video memory means, which displays...

...entered via said user input means, by generating video display instructions which instruct said digital **video controller** to display a single stored digitized video image for certain predefined equipment maintenance tasks and...

...combination set forth in Claim 1,
further including an audio speaker coupled to said digital **video controller** ;
said random access video **memory** means storing both digitized video images and a multiplicity of distinct digitized audio sequences;
said...

...processing unit; said second data processing unit forwarding corresponding audio play instructions to said digital **video controller** ; and
said digital **video controller** sending selected digitized audio sequences stored in said video memory means in accordance with said...

...whereby said computer system can play audio sequences in conjunction with video sequences and message **displays** .
7. The combination set forth in Claim 6, wherein said **application** software includes means for defining a predefined set of pieces of equipment and a predefined...

...entered via said user input means, by generating video display instructions which instruct said digital **video controller** to display a single stored digitized video image for certain predefined equipment maintenance tasks and a sequence of said stored digitized video images for **other** predefined equipment maintenance tasks; said **application** software simultaneously displaying on said first display messages corresponding to said video images;
whereby said...entered via said user input means, by generating video display instructions which instruct said digital **video controller** to display a single stored digitized video image for certain predefined equipment maintenance tasks and...

11/5,K/16 (Item 16 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00401133

Information processing system user interface.
Benutzerschnittstelle fur Informationsverarbeitungssystem.
Interface utilisateur pour un systeme de traitement de l'information.

PATENT ASSIGNEE:
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Nguyen, Ha Hoang, 6802 Tree Fern Lane, Austin, Texas 78750, (US)
Roosken, Cynthia Ann, 10706 Yucca Drive, Austin, Texas 78759, (US)
LEGAL REPRESENTATIVE:
Blakemore, Frederick Norman (28381), IBM United Kingdom Limited Intellectual Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 398648 A2 901122 (Basic)
EP 398648 A3 920311
APPLICATION (CC, No, Date): EP 90305221 900515;
PRIORITY (CC, No, Date): US 352800 890515
DESIGNATED STATES: DE; FR; GB; IT
INTERNATIONAL PATENT CLASS: **G06F-003/023**

CITED REFERENCES (EP A):
PATENT ABSTRACTS OF JAPAN, vol. 11, no. 256 (P-607) 2703 , 20th August 1987; & JP-A-62 063 333 (NEC CORP.) 20-03-1987
RESEARCH DISCLOSURE, September 1988, page 662, disclosure no. 29334; "Graphic indicator for mail status and type"
RESEARCH DISCLOSURE, February 1989, page 99, disclosure no. 29824; "Dynamic icon content"
IDEM
BYTE, vol. 7, no. 4, April 1982, pages 242-282, St. Peterborough, US; D.C. SMITH et al.: "Designing the star user interface"
COMPUTER, vol. 19, no. 9, September 1986, pages 57-67, New York, US; B.A. MYERS: "A complete and efficient implementation of covered windows";

ABSTRACT EP 398648 A2

An application or terminal emulation program, which is being executed on an information processing system, is represented by the display of a first icon on a **display** device. If during the execution of the **application** or terminal emulation program, a virtual **display buffer** associated with the **application program** , is updated, a **second** icon is **displayed** on the **display** device to indicate to a user of the system that a change in the status of the program has occurred. (see image in original document)

ABSTRACT WORD COUNT: 87

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	901122	A2	Published application (A1with Search Report ;A2without Search Report)
Examination:	910206	A2	Date of filing of request for examination: 901213
Search Report:	920311	A3	Separate publication of the European or International search report
Change:	920527	A2	Representative (change)
Examination:	950125	A2	Date of despatch of first examination report: 941208
Withdrawal:	970205	A2	Date on which the European patent application was deemed to be withdrawn: 960813

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	398
SPEC A	(English)	EPABF1	3738
Total word count - document A			4136
Total word count - document B			0
Total word count - documents A + B			4136

with the selected **application program** . As noted above, an update of the virtual **display buffer** indicates a change of status of the selected **application program** . The change of status further indicates that the selected application program has completed its assigned...

...the selected application program needs the attention of the user. Step 90 updates the virtual **display buffer** . Step 92 determines whether the minimized flag is presently set. Step 93 determines whether the update to the virtual **display buffer** is a first update. If it is determined that the update is the first update...

...attention of the user. In response to the completion of the assigned task or the **application** program requiring the attention of the user, the virtual **display buffer** associated with the **application program** is updated. The updating of the virtual **display buffer** facilitates the display of an update icon. The display of the update icon immediately informs the user of a change of status of the **application program** associated therewith. In response to the **display** of the update icon, the user may take the necessary action required for that application program without performing any unnecessary activity in regards to **other application programs** being executed on system 10.
Alternately, the user may use keyboard 22 (Fig. 1) in...

...CLAIMS with said application program on a display unit of said system;
determining whether a virtual **display buffer** associated with said **application program** has been updated; and
displaying , in response to said virtual **display buffer** being updated, a **second** icon associated with said **application program** on said **display** unit to indicated a change in the status of said **application** program.
2. A method as claimed in claim 1 further including the step of minimizing...

...application program on a display unit of said system;
control logic determining whether a virtual **display buffer** associated with said application program has been updated; and
said display system displaying, in response to said virtual **display buffer** being updated, a **second** icon associated with said **application program** on said **display** unit to indicate a change in the status of said **application** program.
9. An information processing system as claimed in claim 8, wherein said first icon...

11/5,K/17 (Item 17 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00353515
Personal computer/host emulation system for handling host data with personal computer application programs at personal computers.
Emulationssystem fur Personalrechner/Hauptrechner zur Verarbeitung von Daten vom Zentralrechner mit Anwendungsprogrammen auf Personalrechnern.
Systeme d'emulation d'ordinateur personnel/hote servant a traiter des donnees de l'hote avec des programmes d'application sur des ordinateurs personnels.
PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)
INVENTOR:
McRoy, Glenn Clarence, RD No. 2, Box 157, Nichols New York 13812, (US)
Yiskis, Eric Norman, 289 Burton Mesa, Lompoc California 93436, (US)
LEGAL REPRESENTATIVE:
Jost, Ottokarl, Dipl.-Ing. (6092), IBM Deutschland GmbH Patentwesen und Urheberrecht Schonaicher Strasse 220, D-7030 Boblingen, (DE)
PATENT (CC, No, Kind, Date): EP 370274 A2 900530 (Basic)
EP 370274 A3 920311
APPLICATION (CC, No, Date): EP 89120177 891031;
PRIORITY (CC, No, Date): US 275341 881123

DESIGNATED STATES: DE; FR; G
INTERNATIONAL PATENT CLASS: **G06F-009/455**
CITED REFERENCES (EP A):
IBM SYSTEMS JOURNAL, vol. 25, no. 1, 1986, pages 116-128, Armonk, NY, US; J.K. KRAVITZ et al.: "Workstations and mainframe computers working together"
SEYBOLD OUTLOOK ON PROFESSIONAL COMPUTING, vol. 5, no. 4, 15th December 1986, pages 25-28, US; B.L. ALPERSON et al.: "Managing RAM resident programs";

ABSTRACT EP 370274 A2
A system for emulating the operation of a terminal connected to a host computing system while retaining the ability to utilize personal computer application programs resident in the personal computer by utilizing a personal computer/host terminal emulation program which conducts an analysis of host data and keystrokes to identify personal computer commands and calls the appropriate resident application program in response to such commands. (see image in original document)
ABSTRACT WORD COUNT: 73

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	900530	A2	Published application (A1with Search Report ;A2without Search Report)
Examination:	901122	A2	Date of filing of request for examination: 900926
Search Report:	920311	A3	Separate publication of the European or International search report
Examination:	950621	A2	Date of despatch of first examination report: 950505
Withdrawal:	971203	A2	Date on which the European patent application was deemed to be withdrawn: 970501

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	596
SPEC A	(English)	EPABF1	4769
Total word count - document A			5365
Total word count - document B			0
Total word count - documents A + B			5365

INTERNATIONAL PATENT CLASS: **G06F-009/455**

...SPECIFICATION in a format according to a first program, by a personal computing system utilizing a **second program** having a **different** format by utilizing the **display buffer** of the personal computer as a facility shared by the personal computer and the host...

...CLAIMS personal computer buffer load routine for storing said converted host data in the personal computer **display buffer** .
4. A system according to claim 1 wherein said keystroke interpretation routine includes a first...

11/5,K/18 (Item 18 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00259160
Display control apparatus.
Anzeigesteuergerat.
Dispositif de commande d'affichage.
PATENT ASSIGNEE:
HITACHI, LTD., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo 101, (JP), (applicant designated states: DE;FR;GB;IT)
INVENTOR:
Yamazaki, Hideki, No. 6-102, 17, Gakuennishi-machi 1-chome, Kodaira-shi Tokyo, (JP)
Takeda, Hiroshi, 4-11, Kihei-cho 1-chome, Kodaira-shi Tokyo, (JP)

LEGAL REPRESENTATIVE:
Strehl Schubel-Hopf Groening & Partner (100941), Maximilianstrasse 54, D-80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 261463 A2 880330 (Basic)
EP 261463 A3 910123
EP 261463 B1 950517
APPLICATION (CC, No, Date): EP 87112830 870902;
PRIORITY (CC, No, Date): JP 86223549 860924
DESIGNATED STATES: DE; FR; GB; IT
INTERNATIONAL PATENT CLASS: G09G-001/00; **G06F-003/153**
CITED PATENTS (EP A): EP 158785 A; EP 172312 A; EP 147542 A; US 4559533 A; WO 8700329 A; EP 247827 A

ABSTRACT EP 261463 A2
A display control apparatus is disclosed which includes window management circuits (WND(sub(i))) having a plurality of area setting registers (SA(sub(i)), TSA(sub(i)), PA(sub(i))) for setting induvidually a plurality of windoy display areas on a display surface, and judging sequentially for each window whether or not a display position on the display surface is contained in the area designated by the register, and a window display priority designation circuit (14) having a plurality of priority setting registers (PRG) for setting display priority of each window, and judging the window having higher priority among those which are judged as containing the display position on the basis of the content of the priority setting register and the result of judgement of the window management circuit.
ABSTRACT WORD COUNT: 129

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	880330	A2	Published application (A1with Search Report ;A2without Search Report)
Change:	890118	A2	Representative (change)
Search Report:	910123	A3	Separate publication of the European or International search report
Examination:	910206	A2	Date of filing of request for examination: 901212
Change:	910313	A2	Obligatory supplementary classification (change)
Examination:	921202	A2	Date of despatch of first examination report: 921016
Grant:	950517	B1	Granted patent
Oppn None:	960508	B1	No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	738
CLAIMS B	(English)	EPAB95	740
CLAIMS B	(German)	EPAB95	584
CLAIMS B	(French)	EPAB95	833
SPEC A	(English)	EPABF1	8164
SPEC B	(English)	EPAB95	8436
Total word count - document A			8902
Total word count - document B			10593
Total word count - documents A + B			19495

...INTERNATIONAL PATENT CLASS: **G06F-003/153**

...SPECIFICATION on a display surface.
Among them, the hardware window system is accomplished by furnishing a **display** controller LSI with a multi-window control function. In the **software** window system, on the **other** hand, a **software** executes a function called "bit block transfer" which transfers data of a rectangular region inside a **frame buffer** for the purpose of multi-window display. (As to multi-window control, refer to "Nikkei...

...SPECIFICATION on a display surface.
Among them, the hardware window system is accomplished by furnishing a **display** controller LSI with a multi-window control function. In the **software** window system, on the **other** hand, a **software** executes a

function called "bit block transfer" which transfers data of a rectangular region inside a **frame buffer** for the purpose of multi-window display. (As to multi-window control, refer to "Nikkei...

...CLAIMS according to claim 2 or any one of the claims appendent thereto, further comprising a **frame buffer** which receives the output of the memory address generating means (WAL(sub 1) to WAL...

...the predetermined memory width for each of said windows as a memory width within the **frame buffer** .

11/5,K/19 (Item 19 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00244391
Improvements in or relating to graphic display systems.
Anzeigesysteme fur graphische Darstellungen.
Systemes d'affichage de graphiques.
PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB;IT)
INVENTOR:
Elsner, Matthew, 17 Holiday Drive, Woodstock New York 12498, (US)
Iida, Yoshio, Lake Katrine Apts., 10-C, Lake Katrine New York 12449, (US)
Kwong, Edward Yuman, 164B Tanglewood Road, West Hurley New York 12491, (US)
Rahim, Omar Mahmoud, 17 Garden Street, Rhinebeck New York 12574, (US)
LEGAL REPRESENTATIVE:
Burt, Roger James, Dr. et al (52152), IBM United Kingdom Limited Intellectual Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)
PATENT (CC, No, Kind, Date): EP 231061 A2 870805 (Basic)
EP 231061 A3 900321
EP 231061 B1 921202
APPLICATION (CC, No, Date): EP 87300124 870108;
PRIORITY (CC, No, Date): US 821102 860121
DESIGNATED STATES: DE; FR; GB; IT
INTERNATIONAL PATENT CLASS: G09G-001/28; G09G-001/16; **G06F-003/153**
CITED PATENTS (EP A): US 4528636 A

ABSTRACT EP 231061 A2
A colour graphics display having a read/write control system for a buffer memory therein provides Line-on-Line and Underpaint mode operation, if selected and enabled, by reading the contents of a **frame buffer** storage location for which new pixel data is being provided, comparing those contents with data representing a display background characteristic or colour, and if the result of the comparison is positive, storing the new pixel data to the **frame buffer** storage location. If the result of the comparison is negative, a selected data value different from the new pixel data is stored to the **frame buffer** storage location.
ABSTRACT WORD COUNT: 104

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	870805	A2	Published application (A1with Search Report ;A2without Search Report)
Examination:	880203	A2	Date of filing of request for examination: 871202
Search Report:	900321	A3	Separate publication of the European or International search report
Change:	900502	A2	Obligatory supplementary classification (change)
Examination:	920318	A2	Date of despatch of first examination report: 920204
Grant:	921202	B1	Granted patent
Change:	930922	B1	Representative (change)

Oppn None: 931124 B1 No opposition filed
Lapse: 970423 B1 Date of lapse of the European patent in a Contracting State: DE 961001, GB 960108
Lapse: 970423 B1 Date of lapse of the European patent in a Contracting State: DE 961001, FR 960930, GB 960108
Lapse: 991020 B1 Date of lapse of European Patent in a contracting state (Country, date): IT 19921202,
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	451
CLAIMS B	(German)	EPBBF1	384
CLAIMS B	(French)	EPBBF1	510
SPEC B	(English)	EPBBF1	4402
Total word count - document A			0
Total word count - document B			5747
Total word count - documents A + B			5747

...INTERNATIONAL PATENT CLASS: **G06F-003/153**

...ABSTRACT Line and Underpaint mode operation, if selected and enabled, by reading the contents of a **frame buffer** storage location for which new pixel data is being provided, comparing those contents with data...

...if the result of the comparison is positive, storing the new pixel data to the **frame buffer** storage location. If the result of the comparison is negative, a selected data value different from the new pixel data is stored to the **frame buffer** storage location. ...

...SPECIFICATION send the image feature instructions to the control system for writing pixel information to the **frame buffer** in accordance with this sort. In **other words** , Underpaint is really a reverse overpaint **effected** via **software** manipulation. Such schemes are typically slow as **compared** with the scanning rate for the **display** device, resulting in a noticeable degradation in the smoothness and rapidity of the change of ...

...CLAIMS B1
1. A method used in a computer **display system** having a **frame buffer** which stores pixel data for display pixels at corresponding storage locations for each pixel and...

...plural modes, say, overwrite and underwrite or line-on-line, wherein the update processing is **performed locally** at the **frame buffer** in response to new pixel data for a particular storage location thereof by:
reading **the contents** of a **frame buffer** storage location for which new pixel data is being provided;
comparing the results of the...

...and
if the result of the step of comparing is positive, storing the new pixel **data to** the **frame buffer** storage location; ELSE
if the result of the step of comparing is negative and a...

...data value different, in a manner determined by the mode selected, from the new pixel **data to** the **frame buffer** storage location.
2. A method as claimed in Claim 1 wherein the step of storing...
...different from the new pixel data comprises restoring the results of the step of reading, **back to** the **frame buffer** storage location, or leaving the buffer store location unchanged, if the store construction so permits...

...data different from either the new pixel data or the results of the step of **reading , to** the **frame buffer** storage location.
4. A method as claimed in any preceding claims including selectively

masking mode...

...new data values are introduced into the display at such locations.

5. A computer display **system having** a **frame buffer** which stores pixel data for display pixels at corresponding storage locations for each pixel, having the capability of modifying, in a **selectable mode** , the **frame buffer** in response to new pixel data for those storage locations, comprising:
means for reading the **contents of** a **frame buffer** storage location for which new pixel data is being provided;
means for comparing the results...

...display background characteristic;
means, responsive to the means for comparing, for storing the new pixel **data to** the **frame buffer** storage location, if the result of a comparison operation is positive; and
means, responsive to the means for comparing, for storing a selected data value different from the new pixel **data to** the **frame buffer** storage location, if the result of a comparison operation is negative.

6. A computer display...

11/5,K/25 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00779675 **Image available**
STANDARDIZATION OF GRAPHICS SYSTEM LOGICAL FRAME BUFFER
STANDARDISATION DE TAMPON DE TRAME LOGIQUE DE SYSTEME GRAPHIQUE
Patent Applicant/Assignee:
PIXO INC, 20400 Stevens Creek Boulevard, Cupertino, CA 95014, US, US (Residence), US (Nationality)
Inventor(s):
MERCER Paul, 515 E. Crescent Drive, Palo Alto, CA 94301, US
Legal Representative:
FLIESLER Martin C, Fliesler Dubb Meyer and Lovejoy LLP, Suite 400, Four Embarcadero Center, San Francisco, CA 94111-4156, US
Patent and Priority Information (Country, Number, Date):
Patent: WO 200113250 A1 20010222 (WO 0113250)
Application: WO 2000US21807 20000810 (PCT/WO US0021807)
Priority Application: US 99374468 19990813
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **G06F-013/14**
International Patent Class: G06T-001/00
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 4804

English Abstract
A method for implementing a bitmapped graphics system involves creating a logical **frame buffer** for a program (209, 212). The method attaches a standardization operation (210, 211, 213, 214) to the logical **frame buffer** (209, 212), so that the standardization operation is automatically executed upon the invocation the of draw function by an application (201, 203, 204). The standardization operation serves to perform all of the functions required to properly transmit the contents of the logical **frame buffer** into the hardware **frame buffer** (206),

arbitrates access to the logical **frame buffer** , if necessary, and performs other useful logical operations such as hiding the cursor prior to drawing into the **frame buffer** and showing the cursor after drawing into the **frame buffer** and logically rotating the **frame buffer** to counteract the peculiar rotation states wired into the hardware **frame buffer** .

French Abstract
L'invention concerne un procede permettant de mettre en oeuvre un systeme graphique en mode point, qui implique la creation d'un tampon de trame logique destine a un programme (209, 212). Ce procede permet d'associer une operation de standardisation (210, 211, 213, 214) au tampon de trame (209, 212) logique, de sorte que cette operation s'execute automatiquement lorsqu'une application (201, 203, 204) demande une fonction de dessin. L'operation de standardisation sert a executer toutes les fonctions requises pour transmettre correctement le contenu du tampon de trame logique au tampon de trame (206) de materiel, le cas echeant, arbitre l'acces audit tampon de trame logique, et execute d'autres operations logiques utiles telles que le masquage du curseur avant de dessiner dans le tampon de trame et son affichage apres avoir dessine dans le tampon de trame. Ladite operation de standardisation permet egalement de faire tourner logiquement le tampon de trame de facon a contrecarrer les etats de rotation particuliers cables dans le tampon de trame du materiel.

Legal Status (Type, Date, Text)
Publication 20010222 A1 With international search report.
Examination 20010719 Request for preliminary examination prior to end of 19th month from priority date

STANDARDIZATION OF GRAPHICS SYSTEM LOGICAL FRAME BUFFER
Main International Patent Class: **G06F-013/14**
Fulltext Availability:
Detailed Description
Claims

English Abstract
A method for implementing a bitmapped graphics system involves creating a logical **frame buffer** for a program (209, 212). The method attaches a standardization operation (210, 211, 213, 214) to the logical **frame buffer** (209, 212), so that the standardization operation is automatically executed upon the invocation the of...

...to perform all of the functions required to properly transmit the contents of the logical **frame buffer** into the hardware **frame buffer** (206), arbitrates access to the logical **frame buffer** , if necessary, and performs other useful logical operations such as hiding the cursor prior to drawing into the **frame buffer** and showing the cursor after drawing into the **frame buffer** and logically rotating the **frame buffer** to counteract the peculiar rotation states wired into the hardware **frame buffer** .

Detailed Description
... an interface to a secondary storage device, such as a hard disk, and a network **interface** .

Figure 2 illustrates three **applications** which interact with **two** graphics
1 5 systems designed according to the methods of the present invention. Application A...

...executed by graphic system A 202. Application B I 203 and application B2 204 perform **application** draw functions which are executed by graphic system B 205. **Display** 104 as illustrated in Figure I includes hardware **frame buffer** 206, hardware display device 207, and display screen 208 as shown in Figure 2. Hardware **frame buffer** 206 provides physical storage used to represent a bitmapped image for display. Hardware display device 207 reads the contents of the hardware **frame buffer** 206,

and
performing a post-process standardization operation.
14 A method as in claim 13,
wherein...

...post-process standardization operation comprises a transforni function for performing a rotation on the logical **frame buffer** .

15 A method as in claim 13,
wherein the post-process standardization operation comprises a communication function for transporting contents of the logical **frame buffer** to a hardware **frame buffer** .

11/5,K/29 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00743936 **Image available**
METHODS AND APPARATUS FOR POSITIONING DISPLAYED CHARACTERS
PROCEDE ET APPAREIL DE POSITIONNEMENT DE CARACTERES AFFICHES
Patent Applicant/Assignee:
MICROSOFT CORPORATION, One Microsoft Way, Redmond, WA 98052, US, US (Residence), US (Nationality)
Inventor(s):
HITCHCOCK Gregory C, 17828 159th Avenue NE, Woodinville, WA 98072-9236, US
Legal Representative:
NYDEGGER Rick D, Workman, Nydegger & Seeley, 1000 Eagle Gate Tower, 60 East South Temple, Salt Lake City, UT 84111, US
Patent and Priority Information (Country, Number, Date):
Patent: WO 200057305 A1 20000928 (WO 0057305)
Application: WO 2000US6762 20000313 (PCT/WO US0006762)
Priority Application: US 99273105 19990319
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **G06F-017/30**
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 12089

English Abstract
Methods and apparatus for rendering and/or displaying images such as text using sub-pixel accuracy are described. In various embodiments, character advance width (402) is determined using pixel precision while left side bearing (404) and/or black body (407) width is determined using sub-pixel precision (911). Such embodiments provide for characters with overall widths (910) corresponding to pixel widths but with the character black bodies (407) being positioned within the overall character space to a higher degree of position than when pixel precision is used. In other embodiments, sub-pixel precision (911) is used for determining a character's overall width (910) as well as left side bearing (404) and black body width (407) values. In such embodiments, black body (407) starting points and left side bearing (404) points are aligned with sub-pixel component boundaries. By treating R, G, B pixel element sub-components as independent luminous intensity sources and by using pixel sub-component accuracy for character width, spacing and positioning, overall image appearance is enhanced as compared to embodiments which use pixel precision for character width, spacing and

positioning values.

French Abstract

L'invention porte sur un procede et un appareil permettant de rendre ou de presenter des images telles que celles de texte (1200) avec une precision du sous-pixel. Dans certaines executions, la largeur de l'avance des caracteres (AW) est determinee avec la precision du pixel, tandis que celle de la marge de gauche et du corps en noir (BB) le sont avec la precision du sous-pixel. Ces executions traitent des caracteres (1200) dont la largeur totale (AW) correspond a un total de pixels, tandis que la partie en noir des caracteres (BB) peut etre positionnee dans l'espace total reserve au caractere avec un niveau de precision superieur au pixel. Dans d'autres executions on utilise la precision du sous-pixel pour determiner la largeur totale d'un caractere ainsi que la marge de gauche et la largeur du corps en noir. Dans ces dernieres executions, les point ou commencent le corps en noir et la marge de gauche sont alignes avec les limites des composants de sous-pixels. En traitant les sous-composants des elements des pixels RGB, comme des sources independantes d'intensite lumineuse, et en les utilisant pour la largeur des caracteres, pour leur espacement et leur positionnement, on ameliore la qualite generale de l'image par rapport aux executions utilisant la precision du pixel a ces memes fins.

Legal Status (Type, Date, Text)
Publication 20000928 A1 With international search report.
Publication 20000928 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
Claim Mod 20001214 Later publication of amended claims under Article 19 received: 20001009
Examination 20010118 Request for preliminary examination prior to end of 19th month from priority date

Main International Patent Class: **G06F-017/30**
Fulltext Availability:
Claims
Claim
... 41 0 41 406
414
FIG, 4

SYSTEM MEMORY 520
---- 522
(ROM) @24
BIO
---- PROCESSING
(**RAM**) L25 UNIT(S) **DISPLAY**
521 **ADAPTER** 548
OPERATING
SYSTEM 535
APPLICATION 523
/A-
PROGRAM (S) 536 SYSTEM BUS
32
OTHER PROGRAM
MODULES 537 53 3 5
HARD DISK /11@ /11"
DRIVE MAGNETIC DI'SK OPTICAL' E
INTERFACE DRIVE DISK DRIVE PO NETWORK /1-L- **INTERFACE**
r
PROGRAM INTERFACE INTERFACE INTE E
DATA 538 R 52
553
DRI 530-@
---- --- ----j
52 7
529
I POINTER JLJ@@@@540

@-542
OPERATING **APPLICATION** **OTHER** **PROGRAM** **PROGRAM** 500
SYSTEM 535' **PROGRAM** (S) 536' MODULES 5371 DATA 5381
C (N) c 623 C(N+2)
R (N...

...BITMAP GLYPH CACHE
815 1 PLAY INF RM
D P
FIG, 7 834 DRIVER
TO **SCREEN** CHARACTER
DISPLAY oO FRAME OUTPUT
ADAPTER BUFFER ROUTINE
APPLICATION 536
TEXT 801 800
OUTPUT
815 81 3
DISPLAY OPERATING
INFORMATION SYSTEM
535
GRAPHICS DISPLAY 803
INTERFACE GLYPH CA -802
804) CONTROLLER
TYPE RASTERIZER...OPERATION
LOAD GENERATED 101 3
RI GI B PIXEL
SUB-COMPONENT LUMINOUS
INTENSITY VALUES INTO
DISPLAY **BUFFER** MEMORY
LOCATIONS AS A FUNCTION
OF LSB AND AW
VALUES
1015
P
FIGs 9
I...

11/5,K/31 **(Item 12 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

00576314 **Image available**
RECOVERABLE METHODS AND SYSTEMS FOR PROCESSING INPUT/OUTPUT REQUESTS INCLUDING VIRTUAL MEMORY ADDRESSES
PROCEDES ET SYSTEMES RECUPERABLES DE TRAITEMENT DE DEMANDES D'ENTREE/SORTIE CONTENANT DES ADRESSES DE MEMOIRE VIRTUELLE
Patent Applicant/Assignee:
MICROSOFT CORPORATION,
Inventor(s):
FORIN Alessandro,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200039687 A1 20000706 (WO 0039687)
Application: WO 99US30859 19991228 (PCT/WO US9930859)
Priority Application: US 98222696 19981229
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: **G06F-012/10**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 13526

English Abstract
A recoverable I/O request processor includes computer-executable instructions for processing I/O requests, such as requests to send or receive data through a network. The recoverable I/O request processor translates virtual memory addresses to physical memory addresses utilizing translation tables local to an I/O device. If a local translation fails, the recoverable I/O request processor requests virtual address mapping information from the operating system.

French Abstract
Un processeur E/S recuperable comprend des instructions executables par ordinateur destinees a traiter des demandes E/S, telles que des demandes d'envoi ou de reception de donnees dans un reseau. Le processeur de demandes E/S recuperable traduit les adresses de memoire virtuelle en adresses de memoire physique a l'aide des tables de traduction locales d'un dispositif E/S. Si une traduction locale echoue, le processeur de demandes E/S recuperable demande des informations de cartographie d'adresses virtuelles au systeme d'exploitation.

Main International Patent Class: **G06F-012/10**
Fulltext Availability:
Claims

Claim
... M-EWR@Y--- NET
N
@22 INTER
(ROM) 21 48 56a
I - Merr
BIOS 24
(**RAM**) 26 PROCESSING **VIDEO**
UNIT **ADAPTER**
OPERATING 1 25 CF
---,SYSTEM 23 NET
A
35
INTER
APPLICATION
Ci PROGRAM
36 Mery
32 33 3
tol **OTHER** -1
PROGRAM
MODULES 37 HARD DISK MAG DISK OPTICAL SERIAL PORT
DRIVE DRIVE DISK DRIVE **INTERFACE**
PROGRAM **INTERFACE** **INTERFACE** **INTERFACE** W/
DATA 30
38
FlopryTrive Op
49@
29 31
50
FiGn 1 40
,,--42
OPERATING **APPLICATION** **OTHER** **PROGRAM**
SYSTEM **PROGRAMS** **PROGRAM** DATA
MODULES
35-) 36J 37J 38J
/11
66
application **program**
68
1/0 device driver
interface
62 64
virtual memory
1/0 device driver manager
Host computer

1/0 device
60...memory
associated virtual operation
memory address
ST4a
FIG. 5(a)
SUBSTITUTE SHEET (RULE 26)
/11
Application 102
OS Communication **Interface**
VI User Agent
1 1 0 117
116 108 107
107 108
User Mode VI...
...Recoverable 1/0 Request
Processor
i 00 60a
FIG2 6
SUBSTITUTE SHEET (RULE 26)
/11
Application 102
OS Communication **Interface** 111
F@Asy@nchronous
translation failure VI User Agent
recovery routine
1 04 110 117...

11/5,K/35 (Item 16 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00373390 **Image available**
DISPLAY CONTROL SYSTEM WITH SUBSYSTEMS CORRESPONDING TO DIFFERENT DISPLAY REGIONS
CIRCUITS, SYSTEMES ET PROCEDES POUR TOPOGRAPHIE MEMOIRE, ET SYSTEMS DE COMMANDE D'AFFICHAGE LES UTILISANT
Patent Applicant/Assignee:
CIRRUS LOGIC INC,
Inventor(s):
TAYLOR Ronald T,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9714133 A2 19970417
Application: WO 96US15583 19960927 (PCT/WO US9615583)
Priority Application: US 95534279 19950927
Designated States: JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: G09G-005/14
International Patent Class: **G06F-03:14 ; G06F-12:06**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 5781

English Abstract
A processing system (100) is disclosed which includes a system master (101), a system bus (102) coupled to the master, and a plurality of bus interface circuits (106) coupled to bus (102). A first one of the bus interfaces (106) includes a mapping signal input coupled to the master and a mapping signal output, the first bus interface (106) operable to latch-in at least one first selected address bit presented by the master on the system bus in response to a mapping enable signal received at the mapping signal input from the master (101). A second bus interface (106) is provided coupled to the bus (102) and having a mapping signal input coupled to the mapping signal output of first bus interface (106), the second bus interface (106) operable to latch-in at least one second selected address bit presented by the master (101) on the bus (102) in

response to a second mappi[redacted]enable signal received at th[redacted]apping input of the second bus interface (106) from the first bus interface (106).

French Abstract
l'invention porte sur un systeme de traitement (100), qui comprend une unite principale (101), un bus systeme (102) couple a l'unite principale, et une pluralite de circuits d'interfaces de bus (106) couples au bus (102). Une des premieres interfaces de bus (106) comprend une entree de signaux topographiques couplee a l'unite principale, et une sortie de signaux topographiques, l'interface de bus (106) etant concue pour verrouiller au moins un premier bit d'adresse selectionne presente par l'unite principale sur le bus en reponse a un signal de validation de topographie recu a l'entree de signaux topographiques de l'unite principale (101). Une seconde interface de bus (106) est couplee au bus (102) et a une entree de signaux topographiques couplee a la sortie de signaux topographiques de la premiere interface de bus (106), la seconde interface de bus (106) etant concue pour verrouiller au moins un second bit d'adresse selectionne presente par l'unite principale (101) sur le bus (102) en reponse a un second signal de validation de topographie recu a l'entree de signaux topographiques de la seconde interface de bus (106) a partir de la premiere interface de bus (106).

International Patent Class: **G06F-03:14** ...

... **G06F-12:06**
Fulltext Availability:
Detailed Description
Claims

Detailed Description
... As another example, display unit I may be generating the system window or desk top, **display** unit 2 a graphics window for a first **application** and **display** unit 3 a graphics window for a **second application** . Numerous **other** combinations are possible. **Display** control task partitioning, such as that illustrated in FIGUREs 2A and 2B provides substantial advantages over the prior art. Among other things, while the data in the **frame buffer** 105 of one selected unit 103 is being updated, the remaining units 103 can continue...

Claim
... subsystems comprises:
a bus interface for coupling said subsystem to said system bus; and
a **display controller** coupled to said bus interface.

3. The display control system of Claim 2 wherein each said display control subsystem further includes a **frame buffer memory** coupled to said **display controller** .

4. The display control system of Claim 3 wherein each of said display control systems...18. The system of Claim 14 wherein said first and second resources each comprise a **display controller** for driving corresponding first and second regions of a display screen of an associated display...

11/5,K/36 (Item 17 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00294018
METHOD AND APPARATUS FOR PROVIDING FAST MULTICOLOR STORAGE IN A FRAME BUFFER
PROCEDE ET APPAREIL PERMETTANT DE MEMORISER RAPIDEMENT PLUSIEURS COULEURS DANS UN TAMPON D'IMAGE
Patent Applicant/Assignee:
SUN MICROSYSTEMS INC,
SAMSUNG SEMICONDUCTOR INC,
Inventor(s):

PRIEM Curtis,
MALACHOWSKY Chris,
SILVERMAN Rick,
CHANG Shuen Chin,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9512167 A1 19950504
Application: WO 94US12361 19941027 (PCT/WO US9412361)
Priority Application: US 93145756 19931029
Designated States: JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **G06F-015/00**
International Patent Class: **G06F-12:00**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 8334

English Abstract
A **frame buffer** for accelerating the display of graphics data on an output display device which **frame buffer** includes a pair of color value registers (C0, C1) each of which may be loaded with color values prior to writing to the **frame buffer** . Selection means (42) are provided for selecting pixel data from the bus, from a first of the color value registers, from the second of the color value registers, or from both color value registers simultaneously. When data is written to the **frame buffer** from color value registers it may be written to a number of pixel positions simultaneously.

French Abstract
L'invention concerne un tampon d'image concu pour accelerer l'affichage de donnees graphiques sur un dispositif d'affichage de sortie. Ce tampon d'image comprend une paire de registres de valeurs de couleurs (C0, C1), qui peuvent chacun etre charge avec des valeurs de couleurs avant l'ecriture dans le tampon d'image. Des moyens de selection (42) sont prevus pour selectionner des donnees d'elements d'image a partir du bus, a partir du premier des registres de valeurs de couleurs, du deuxieme de ces memes registres, ou a partir des deux registres de valeurs de couleurs simultanement. Lorsque des donnees sont ecrites dans le tampon d'image, a partir des registres de valeurs de couleur, elles peuvent etre ecrites dans un certain nombre de positions d'elements d'image simultanement.

METHOD AND APPARATUS FOR PROVIDING FAST MULTICOLOR STORAGE IN A FRAME BUFFER
Main International Patent Class: **G06F-015/00**
International Patent Class: **G06F-12:00**
Fulltext Availability:
Detailed Description
Claims

English Abstract
A **frame buffer** for accelerating the display of graphics data on an output display device which **frame buffer** includes a pair of color value registers (C0, C1) each of which may be loaded with color values prior to writing to the **frame buffer** . Selection means (42) are provided for selecting pixel data from the bus, from a first...
...value registers, or from both color value registers simultaneously. When data is written to the **frame buffer** from color value registers it may be written to a number of pixel positions simultaneously.

Detailed Description
... pixel may be written simultaneously with that one color. As pointed out, a window uses **two** colors to **display** any typical **application** . The graphical accelerating devices and **software** which furnish pixel information to the **frame buffer** 17 typically manipulate two colors at once in order to enhance the speed of operation...

Claim

... unit,
main memory,
a busing system including a data bus,
an output display, and
a **frame buffer** joining the busing system to the output display, the **frame buffer**
comprising
an array of memory cells for storing data indicating pixels to be displayed on...value registers to a plurality of storage positions in the array simultaneously. Claim 9. A **frame buffer** designed to be coupled to a data bus and to an output
display in a computer system, the **frame buffer** comprising
an array of memory cells for storing data indicating pixels to be displayed on...

...value registers to a plurality of storage positions in the array simultaneously. Claim 10. A **frame buffer** as claimed in Claim 9 in which the circuitry for writing color value data from...

...color values from the color registers and from the data bus. Claim 1 1. A **frame buffer** as claimed in Claim 10 in which the means for
causing the multiplexors to select...

...data bus comprises circuitry for transferring control signals on the data bus. Claim 12. A **frame buffer** as claimed in Claim 9 in which the circuitry for writing color value data from...

...value register to a plurality of storage positions in the array simultaneously.
Claim 13. A **frame buffer** as claimed in Claim 12 in which the circuitry
connected for writing from a single...

...select color
values from the color registers and from the data bus
Claim 14. A **frame buffer** as claimed in Claim 9 in which the circuitry for writing color value data from...

...value registers to a plurality of storage positions in the array simultaneously.
Claim 15. A **frame buffer** as claimed in Claim 14 in which the circuitry
connected for writing from both color...

...select color values from the color registers and from the data bus.
Claim 16. A **frame buffer** as claimed in ...of storage positions in the array simultaneously. Claim 17. A method for writing to a **frame buffer** including an array of memory
cells comprising the steps of
writing a first color value to a first color value register of the **frame buffer** , writing a second color value to a second color value register of the **frame buffer** ,
and
selecting a color value to write to a plurality of memory cells simultaneously.Claim

18 A method for writing to a **frame buffer** as claimed in Claim 17 further
comprising the step of selecting another color value to...

...need to reload a color value register. Claim 19. A method for writing to a **frame buffer** as claimed in Claim 17 in which the step of selecting a color value to...

11/5,K/37 (Item 18 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00294017

MULTIPLE BLOCK MODE OPERATIONS IN A FRAME BUFFER **SYSTEM DESIGNED FOR WINDOWING OPERATIONS**

FONCTIONNEMENTS EN MODE PAR BLOCS MULTIPLES DANS UN SYSTEME DE TAMPON D'IMAGE PREVU POUR DES OPERATIONS DE DECOUPAGE EN FENETRES

Patent Applicant/Assignee:
SUN MICROSYSTEMS INC,
SAMSUNG SEMICONDUCTOR INC,
Inventor(s):
PRIEM Curtis,
CHANG Shuen Chin,
HO Hai Duy,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9512166 A1 19950504
Application: WO 94US12360 19941027 (PCT/WO US9412360)
Priority Application: US 93145755 19931029
Designated States: JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **G06F-015/00**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 11945

English Abstract
A **frame buffer** having a memory array (32), circuitry for accessing the array, a plurality of color value registers (C0 and C1) for storing a plurality of color values which may be written to the array, and circuitry for writing to the memory cells a data representing a single pixel, for writing simultaneously to the memory cells data representing a number of pixels equal to the number of conductors (38) on the data bus (38), or for writing simultaneously to the memory cells data representing an entire row of pixels of the array (34 and 36).

French Abstract
L'invention concerne un tampon d'image comportant un groupement de boitiers memoires (32), des circuits permettant d'acceder a ce groupement, plusieurs registres de valeurs de couleur (C0 et C1) permettant de memoriser plusieurs valeurs de couleurs qui peuvent etre ecrites dans ce groupement de boitiers memoires. Il comprend egalement des circuits concus pour enregistrer dans les cellules memoire une donnee representant un seul element d'image, pour enregistrer simultanement dans les cellules memoire des donnees representant un nombre d'elements d'images egal au nombre de conducteurs (38) sur le bus de donnees (38), ou pour enregistrer simultanement, dans les cellules memoire, des donnees representant une rangee entiere d'elements d'images du groupement de boitiers memoires (34 et 36).

MULTIPLE BLOCK MODE OPERATIONS IN A FRAME BUFFER **SYSTEM DESIGNED FOR WINDOWING OPERATIONS**

Main International Patent Class: **G06F-015/00**
Fulltext Availability:
Detailed Description
Claims

English Abstract
A **frame buffer** having a memory array (32), circuitry for accessing the array, a plurality of color value...

Detailed Description
... A more major problem with this prior art block mode of operation is that the **frame buffer** is only capable of dealing with one color at a time although more than one pixel may be written simultaneously with that one color. As pointed out, a window uses **two** colors to **display** any typical **application** . The graphical accelerating devices and **software** which furnish pixel information to the **frame buffer** 17 typically

a **frame buffer** as claimed in Claim 17 in which the step of writing the selected color value...

...of eight, sixteen, or thirty-two bits. Claim 19. A method for writing to a **frame buffer** as claimed in Claim 16 in which the control signal value on any data conductor...

...representing a single pixel on the display. Claim 20. A method for writing to a **frame buffer** as claimed in Claim 19 in which the step of writing the selected color value...

11/5,K/41 (Item 22 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00204065
APPLICATION ADDRESS DISPLAY WINDOW MAPPER FOR A SHARABLE MS-DOS PROCESSOR
DISPOSITIF DE MAPPAGE DE FENETRES D'AFFICHAGE D'ADRESSES D'APPLICATION POUR PROCESSEUR MS-DOS PARTAGEABLE
Patent Applicant/Assignee:
ATHENIX CORPORATION,
Inventor(s):
GARMAN Jonathan D,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9201256 A1 19920123
Application: WO 91US4691 19910702 (PCT/WO US9104691)
Priority Application: US 90592 19900710
Designated States: AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL NO SE
Main International Patent Class: **G06F-012/10**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 3705

English Abstract
In accordance with the present invention, an address mapper (160) is provided between the CPU (100) running an MS-DOS application program and a **frame buffer** (159), so as to allow the **frame buffer** to be mapped into the CPU address space expected by an MS-DOS application program. A write operation by the MS-DOS application program into the CPU's (100) display address space is translated by the address mapper to be performed in the address space of the **frame buffer** , providing to the user the appearance as if the **frame buffer** is part of the CPU's address space ("Virtual MS-DOS display"). This **frame buffer** (159) may have an address space larger than that used by the MS-DOS application program for writing to the display. This additional space can be allocated to other processes, which are each protected from inadvertently reading or writing into another process' allocated memory space.

French Abstract
Selon cette invention, un dispositif de mappage d'adresses (160) est dispose entre l'UC (100) executant un programme d'application MS-DOS et un tampon d'images (159), de maniere a permettre de mapper le tampon d'images dans l'espace d'adresses de l'UC attendu par un programme d'application MS-DOS. Une operation d'ecriture effectuee par le programme d'application MS-DOS dans l'espace d'adresses d'affichage de l'UC (100) est traduit par le dispositif de mappage d'adresses pour etre execute dans l'espace d'adresse du tampon d'images, donnant a l'utilisateur l'impression que le tampon d'images fait partie de l'espace d'adresses de l'UC ("affichage MS-DOS virtuel"). Ce tampon d'image (159) peut comporter un espace d'adresses plus grand que celui utilise par le programme d'application MS-DOS pour permettre une ecriture sur l'affichage. Cet espace supplementaire peut etre affecte a d'autres traitements, lesquels sont proteges contre une lecture ou une ecriture accidentelle dans un autre espace de memoire affecte a un traitement.

Main International Patent Cl[redacted]: **G06F-012/10**
Fulltext Availability:
Detailed Description
Claims

English Abstract
...160) is provided between the CPU (100) running an MS-DOS application program and a **frame buffer** (159), so as to allow the **frame buffer** to be mapped into the CPU address space expected by an MS-DOS application program...

...is translated by the address mapper to be performed in the address space of the **frame buffer** , providing to the user the appearance as if the **frame buffer** is part of the CPU's address space ("Virtual MS-DOS display"). This **frame buffer** (159) may have an address space larger than that used by the MS-DOS application...

Detailed Description
... for
the MS-DOS operating system ("MS-DOS application programs"),, which expect a memory mapped **frame buffer** 15 system, such as implemented in the IBM pCT112 personal computers, the overhead cost of...

...run very
slowly. A number of commercial products have been developed to allow MS-DOS **application programs** to run on 20 **other** CPUs without a memory mapped **frame buffer** system. A popular method is the centralized multiuser system, running a MS-DOS application on...

...to support video
25 transmission, In such centralized multiuser system, the operating system traps a **frame buffer** write operation of the **application program** and emulates the **display** by translating the **frame buffer** write operation into a control sequence which can ...address
mapper is provided between the CPU running a MS@DOS application program and a **frame buffer** , so as to allow the 5 **frame buffer** to be mapped into the CPU's address space expected by a MS@DOS application program. A write operation by the MS@DOS **application program** into the CPU's **display** address space is translated by the address mapper such that the write operation is performed in the address space of the **frame buffer** , providing to the user the appearance as if the **frame buffer** is part of the CPU's address space ("Virtual MS-DOS display"). This **frame buffer** may have an address space larger than that used by the MS-DOS **application program** for writing to the **display** .

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File 248:PIRA 1975-2003/N    W1
         (c) 2003 Pira International
File   8:Ei Compendex(R) 1970-2003/Oct W4
         (c) 2003 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2003/Sep
         (c) 2003 ProQuest Info&Learning
File 202:Info. Sci. & Tech. Abs. 1966-2003/Sep 16
         (c) 2003 EBSCO Publishing
File  65:Inside Conferences 1993-2003/Nov W1
         (c) 2003 BLDSC all rts. reserv.
File   2:INSPEC 1969-2003/Oct W4
         (c) 2003 Institution of Electrical Engineers
File 233:Internet & Personal Comp. Abs. 1981-2003/Jul
         (c) 2003, EBSCO Pub.
File  94:JICST-EPlus 1985-2003/Nov W1
         (c)2003 Japan Science and Tech Corp(JST)
File 603:Newspaper Abstracts 1984-1988
         (c)2001 ProQuest Info&Learning
File 483:Newspaper Abs Daily 1986-2003/Nov 04
         (c) 2003 ProQuest Info&Learning
File   6:NTIS 1964-2003/Nov W1
         (c) 2003 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2003/Oct W4
         (c) 2003 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  34:SciSearch(R) Cited Ref Sci 1990-2003/Oct W4
         (c) 2003 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2003/Sep
         (c) 2003 The HW Wilson Co.
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 266:FEDRIP 2003/Sep
         Comp & dist by NTIS, Intl Copyright All Rights Res
File  95:TEME-Technology & Management 1989-2003/Oct W3
         (c) 2003 FIZ TECHNIK
File 438:Library Lit. & Info. Science 1984-2003/Sep
         (c) 2003 The HW Wilson Co

Set     Items   Description
S1      17558   (VIDEO OR GRAPHICS OR DISPLAY OR VGA OR SVGA OR 3D)(1W)(CA-
             RD? ? OR BOARD? ? OR CONTROLLER? ? OR ADAPTER? ? OR ACCELERAT-
             OR? ?)
S2       3816   S1(5N)(BUFFER? ? OR MEMORY OR MEMORIES OR RAM) OR DISPLAY(-
             )BUFFER? ? OR FRAME()BUFFER? ? OR FRAMEBUFFER? ?
S3    3703241   INTERFACE? ? OR PANE? ? OR GUI? ? OR LAYOUT? ? OR SCREEN? ?
              OR MENU? ? OR TOOLBAR? ? OR TOOL()BAR? ? OR DISPLAY? OR VIEW-
             ???
S4     244831   S3(10N)(APPLICATION? ? OR PROGRAM? ? OR SOFTWARE)
S5     582177   (DIFFERENT OR SEPARATE OR ANOTHER OR OTHER OR MULTIPLE OR -
             MULTIPLICITY OR PLURAL OR DUAL? OR SECOND OR 2ND OR TWO OR VA-
             RIOUS OR ASSORT? OR SEVERAL OR INDEPENDENT)(5N)(APPLICATION? ?
              OR PROGRAM? ? OR SOFTWARE)
S6         397   S2 AND S4
S7          67   S6 AND S5
S8          58   RD (unique items)
S9          55   S8 NOT PY=2001:2003
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9/5/1 (Item 1 from file: 248)
DIALOG(R)File 248:PIRA

00357586 Pira Acc. Num.: 10280245 Pira Abstract Numbers: 08-93-PU02399
Title: TV PAINT 2
Authors: Larkman B
Source: Amiga Format no. 47, June 1993, pp 138-139
Publication Year: 1993
Document Type: Journal Article
Language: English
Pira Subfiles: Printing and Publishing (PP); World Publishing Monitor (PU)
Journal Announcement: 9308
Abstract: A product review is given of TV Paint 2, a true colour art program from TecSoft. TV Paint 2 has a higher degree of user control and **several** new features. The **program** now offers a friendlier, and more intuitive **interface** . The new features include floating palettes, interactive ARexx and Zoom Out of SuperBitmaps. The features of TV Paint 2 are described, and the benefits and the drawbacks of the program are highlighted. The competition between TV Paint and OpalPaint is discussed. A separate section describes the Amiga Centre Scotland's Harlequin 24-bit **frame buffer** , and the use of Harlequin with TV Paint 2.
Company Names: TECSOFT
Trade Names: HARLEQUIN; OPALPAINT; TV PAINT
Descriptors: ARTWORK CREATION; COLOUR; COMPETITION; CONTROL; INTERACTIVE; INTERFACE; NEW; NEW SOFTWARE; PRODUCT REVIEW; PROGRAM; TELEVISION
Section Headings: Artwork Creation (8243)

9/5/2 (Item 2 from file: 248)
DIALOG(R)File 248:PIRA

00108787 Pira Acc. Num.: 5257893 Pira Abstract Numbers: 05-83-01833
Title: OFFICE WORKSTATION GETS BIT-MAP GRAPHICS
Authors: Hoffman D
Source: Mini-micro Syst. Feb. 1983, pp 245-246, 248, 250
Publication Year: 1983
Document Type: Journal Article
Language: English
Pira Subfiles: Electronic Publishing Abstracts (EP)
Journal Announcement: 8309
Abstract: The combining of high performance bit-map graphics with low resolution graphics by means of a bit-map graphics board developed by Convergent Technologies is featured. The graphics board is added to an intelligent workstation to provide both bit-map and character-oriented video, including vector and raster drawing modes. The full system is described, with special attention given to the drawing modes, **display** memory and multilevel graphics **software** . **Various** schematic diagrams illustrate the video subsystem, **display memory controller** , **graphics board** , and IWS electronics.
Company Names: CONVERGENT TECHNOLOGIES
Descriptors: BOARD; CONTROLLER; DISPLAY; DRAWING; ELECTRONIC; GRAPHICS; HIGH; LOW; MEANS; MEMORY; OFFICE; RASTER; RESOLUTION; SCHEMATIC; SOFTWARE; SYSTEM; VECTOR; VIDEO; WORK STATION
Section Headings: Terminals and Workstations (5064)

9/5/3 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06269998 E.I. No: EIP03037321252
Title: SONIC - A plug-in architecture for video processing
Author: Haynes, Simon D.; Cheung, Peter Y.K.; Luk, Wayne; Stone, John
Corporate Source: Imperial Coll. of Sci. Technol. Med., London, United Kingdom

Conference Title: Proceedings of the 7th Annual IEEE Symposium on Field-Programmable Custom Computing Machines (FCMM 1999)
Conference Location: Napa Valley, CA, United States Conference Date: 19990421-19990423
Sponsor: IEEE Computer Society
E.I. Conference No.: 60549
Source: IEEE Symposium on FPGAs for Custom Computing Machines, Proceedings 1999. p 280-281
Publication Year: 1999
ISSN: 1082-3409
Language: English
Document Type: CA; (Conference Article) Treatment: G; (General Review)
Journal Announcement: 0301W3
Abstract: This paper presents the SONIC reconfigurable computing architecture and the first implementation, SONIC-1. SONIC is designed to support a software plug-in methodology to accelerate video image processing **applications** . SONIC differs from **other** architectures through the use of Plug-In Processing Elements (PIPEs) and the **Application** Programmer's **Interface** (API). Each PIPE contains a reconfigurable processor, a scalable router that also formats, video data, and a **frame - buffer** memory. The SONIC architecture integrates multiple PIPEs together using a specialised bus structure which enables flexible and optimal pipelined processing. SONIC-1 communicates with the host PC through the PCI bus and has 8 PIPEs. We have developed an easy to use API which allows SONIC-1 to be used by **multiple applications** simultaneously. Preliminary results show that a 19 tap separable 2-D FIR filter implemented on a single PIPE achieves processing rates of more than 15 frames per second operating on 512 multiplied by 512 video transferred over the PCl bus. We estimate that using all 8 PIPEs, we could obtain real-time processing rates for complex operations such as image warping. 1 Refs.
Descriptors: Computer architecture; Image processing; Computer **software** ; User **interfaces** ; Field programmable gate arrays; Routers; Buffer storage; Network protocols; FIR filters; Pipeline processing systems
Identifiers: Reconfigurable computing architecture; Plug-in processing elements; **Application** programmer **interface** ; Local bus controller
Classification Codes:
722.4 (Digital Computers & Systems); 723.2 (Data Processing); 723.1 (Computer Programming); 722.2 (Computer Peripheral Equipment); 721.2 (Logic Elements); 722.1 (Data Storage, Equipment & Techniques)
722 (Computer Hardware); 723 (Computer Software, Data Handling & Applications); 721 (Computer Circuits & Logic Elements)
72 (COMPUTERS & DATA PROCESSING)

9/5/5 (Item 3 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03844846 E.I. No: EIP94021218482
Title: Sparcchair: a one hundred million pixel display
Author: Reichlen, Bruce A.
Corporate Source: Sun Microsystems Lab Inc, Chelmsford, MA, USA
Conference Title: 1993 IEEE Annual Virtual Reality International Symposium
Conference Location: Seattle, WA, USA Conference Date: 19930918-19930922
Sponsor: IEEE; SPIE
E.I. Conference No.: 19663
Source: 1993 IEEE Annual Virtual Reality International Symposium 1993 IEEE Annu Virtual Reality Int Symp 1993. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA,(IEEE cat n 93CH3336-5). p 300-307
Publication Year: 1993
ISBN: 0-7803-1364-X
Language: English
Document Type: CA; (Conference Article) Treatment: A; (Applications); X ; (Experimental)
Journal Announcement: 9406W1

Abstract: We investigat[redacted]whether a high-resolution head-[redacted]nted display, roving around a much larger **frame buffer** image, can give a user the impression of viewing a single very large display screen. We constructed a prototype consisting of an 1120 multiplied by 900 pixel head-mounted display, an ultrasonic head-tracker, a 16,384 multiplied by 6,144 pixel **frame buffer** , and suitable X-window control software, as a means of studying this question. Applications can write to the large **frame buffer** using the window system, and the viewer can navigate around the image rapidly using head rotations. To make our prototype work, changes were made to the X window display manager, such as in the positioning of user-interface objects and in the coupling between the mouse and the head tracker. User experiments were run using **two applications** adapted for this system and **several** traditional desk-top **applications** . The prototype system, although somewhat awkward to use due to a limited field of view in the head-mounted display, showed that head rotation is a fast, convenient way to switch display contexts, a capability that has proven to be slow and aggravating with conventional displays and window systems. (Author abstract) 7 Refs.

Descriptors: **Display** devices; Ultrasonic **applications** ; User **interfaces** ; Image processing

Identifiers: Head-mounted display; Large **display screen** ; Ultrasonic head-tracker; Head-rotation sensor; X-window control **software**

Classification Codes:

722.2 (Computer Peripheral Equipment); 723.2 (Data Processing); 741.2 (Vision); 741.3 (Optical Devices & Systems)

722 (Computer Hardware); 723 (Computer Software); 741 (Optics & Optical Devices)

72 (COMPUTERS & DATA PROCESSING); 74 (OPTICAL TECHNOLOGY)

9/5/6 (Item 4 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

03414847 E.I. Monthly No: EIM9204-017878

Title: A NeXT-based high performance image computing workstation for biomedical applications.

Author: Kim, Yongmin; Haass, Clark D.

Corporate Source: Dept of Electr Eng, Univ of Washington, Seattle, WA, USA

Conference Title: Proceedings of the 12th Annual International Conference of the IEEE Engineering in Medicine and Biology Society

Conference Location: Philadelphia, PA, USA Conference Date: 19901101

E.I. Conference No.: 15414

Source: Biomedical Engineering Perspectives: Health Care Technologies for the 1990's and Beyond Proceedings of the Annual Conference on Engineering in Medicine and Biology pt 1. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA (IEEE cat n 90CH2936-3). p 219-220

Publication Year: 1990

CODEN: CEMBAD ISSN: 0589-1019 ISBN: 0-87942-559-8

Language: English

Document Type: PA; (Conference Paper) Treatment: A; (Applications)

Journal Announcement: 9204

Abstract: A series of inexpensive graphics and image processing workstations with high performance is being developed by taking advantage of a sharp decrease in hardware costs, increasingly more powerful VLSI chips, and versatile personal computers and workstations. After accumulating experience with the PC-based image processing systems UWGSP1 and UWGSP2, a third workstation based on the NeXT computer was developed. The architecture, detailed specifications, user **interface** , and **application software** of the University of Washington Graphics System Processor #3 (UWGSP3) are described. With its increased display resolution, enlarged **frame buffer** storage, multiple floating point processors, and intuitive graphics user interface, UWGSP3 represents an innovation in image computing workstation design and a step towards providing affordable real-time **display** and processing for a variety of **other** biomedical **applications** . A description is given of RadGSP, a radiology workstation based on UWGSP3. 4 Refs.

Descriptors: *BIOMEDICAL ENGINEERING--*Imaging Techniques; COMPUTERS, PERSONAL--Medical Applications; IMAGE PROCESSING--Computer Aided Analysis; COMPUTER SOFTWARE; RADIOGRAPHY--Computer Applications; COMPUTER GRAPHICS
Identifiers: RADIOLOGY WORKSTATION RADGSP; IMAGE COMPUTING WORKSTATIONS
Classification Codes:
461 (Biotechnology); 741 (Optics & Optical Devices); 941 (Acoustical & Optical Measuring Instruments); 723 (Computer Software)
46 (BIOENGINEERING); 74 (OPTICAL TECHNOLOGY); 94 (INSTRUMENTS & MEASUREMENT); 72 (COMPUTERS & DATA PROCESSING)

9/5/7 (Item 5 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02996946 E.I. Monthly No: EI9012138588
Title: Developing the GX graphics accelerator architecture.
Author: Priem, Curtis R.
Corporate Source: Sun Microsystems Inc, Mountain View, CA, USA
Source: IEEE Micro v 10 n 1 Feb 1990 p 44-54
Publication Year: 1990
CODEN: IEMIDZ ISSN: 0272-1732
Language: English
Document Type: JA; (Journal Article) Treatment: A; (Applications)
Journal Announcement: 9012
Abstract: A novel approach to acceleration is described whereby high-level graphics on entry-level workstations has become practical. In the GX, the host CPU functions as the intelligent controller and **two** large ASICs (**application** -specific ICs) supply hardwired graphics functions. An arbitrary quadrilateral is the GX's only geometric primitive. However, it can readily approximate circle and arc primitives with short line segments. In addition, the GX supports flat shading of images only when every pixel on a polygon is the same color or intensity. However, by breaking the object into many smaller objects (tessellation), each with its own color, users can obtain a visually acceptable approximation to Gouraud-shading techniques. A description is given of the **frame buffer** chip and its graphic attributes and of the transformation engine and cursor chip. The chips do not have the complex instructions found in CISC (complex-instruction-set-computer) processors; rather, they perform the equivalent of very complicated software subroutines. The high speed and scalable performance of the GX and its **software interface** are discussed. 4 Refs.
Descriptors: *COMPUTER GRAPHICS--*Interactive; COMPUTER ARCHITECTURE; IMAGE PROCESSING; COMPUTER PERIPHERAL EQUIPMENT--Graphics
Identifiers: GX GRAPHICS ACCELERATOR ARCHITECTURE; IMAGE FLAT SHADING; INTELLIGENT DMA CONTROLLER; OBJECT TESSELATION
Classification Codes:
723 (Computer Software); 722 (Computer Hardware)
72 (COMPUTERS & DATA PROCESSING)

9/5/9 (Item 7 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02175189 E.I. Monthly No: EI8703023164
Title: SCHEDULING OF DISPLAY BUFFER PROGRAM **EXECUTION.**
Author: Anon
Source: IBM Technical Disclosure Bulletin v 29 n 5 Oct 1986 p 2064-2067
Publication Year: 1986
CODEN: IBMTAA ISSN: 0018-8689
Language: ENGLISH
Document Type: JA; (Journal Article) Treatment: A; (Applications)
Journal Announcement: 8703
Abstract: In a **display** system with **several** buffers, a buffer **program** is executed for each **display** sequentially to generate a picture on each **display** . To avoid flicker, all **programs** should ideally be executed in a fixed time which is less than the flicker threshold time. An algorithm is

disclosed which ensures that any spare time is distributed between **displays** . The **programs** are run in a fixed time unless the total execution time of the program's time exceeds the fixed time, when they are run as often as possible. The algorithm has **applications** in directed beam and raster **displays** . This article discloses an improved way of scheduling the execution of **display buffer programs** of **several** directed beam **displays** , so as to reduce the possibility of flicker. It is also applicable to raster systems where one **display buffer** update system is shared between several **display buffers** (devices), and could be used to improve the smoothness of animation of such displays. The description concentrates on the directed beam case.

Descriptors: *DISPLAY DEVICES--*Computer Applications; COMPUTER PROGRAMMING; COMPUTER PERIPHERAL EQUIPMENT--Graphics

Identifiers: **DISPLAY BUFFER PROGRAM** ; RASTER **DISPLAYS** ; BUFFER **PROGRAM** ; FIXED TIME; DIRECTED BEAM **DISPLAYS**

Classification Codes:

722 (Computer Hardware); 723 (Computer Software); 741 (Optics & Optical Devices)

72 (COMPUTERS & DATA PROCESSING); 74 (OPTICAL TECHNOLOGY)

9/5/10 (Item 8 from file: 8)

02119761 E.I. Monthly No: EIM8609-062783

Title: INTERACTIVE DIGITAL IMAGE PROCESSING WORKSTATION FOR THE EARTH SCIENCES.

Author: Guberek, Michael; Borders, Stephen

Corporate Source: Global Imaging Inc, Solana Beach, CA, USA

Conference Title: Applications of Digital Image Processing VIII.

Conference Location: San Diego, CA, USA Conference Date: 19850820

Sponsor: SPIE, Bellingham, WA, USA; Univ of Arizona, Optical Sciences Cent, Tucson, AZ, USA; Univ of Rochester, Inst of Optics, Rochester, NY, USA; Univ of Southern California, Image Processing Inst, Los Angeles, CA, USA

E.I. Conference No.: 08304

Source: Proceedings of SPIE - The International Society for Optical Engineering v 575. Publ by SPIE, Bellingham, WA, USA p 203-205

Publication Year: 1985

CODEN: PSISDG ISSN: 0277-786X ISBN: 0-89252-610-6

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8609

Abstract: An interactive digital image processing workstation has been developed for oceanographic, metorological, geophysical applications. The turn-key system provides the capability to process imagery from commonly used ocean observation spacecraft, in conjunction with in situ data sets. The system is based on the Hewlett-packard 9000, a high-performance 32-bit processor (CPU), with a direct address range of 500 Megabytes. The Metheus Omega series of display controllers are used to drive the color CRT **display** . The **controller memory** may hold up to 1280 X 1024 X 32 MINUS bit images. The applications software includes programs to perform geometric correction, earth location, and registration of remotely sensed data. These programs handle imagery from the Advanced Very High Resolution Radiometer (AVHRR), the Coastal Zone Color Scanner (CZCS), the Multispectral Scanner (MSS), the Scanning Multichannel Microwave Radiometer (SMMR), and the Visual and Infrared Spin Scan Radiometer (VISSR). **Other programs** permit **displaying** monochrome and true-color images. (Edited author abstract) 9 refs.

Descriptors: *IMAGE PROCESSING; SIGNAL PROCESSING--Digital Techniques

Identifiers: INTERACTIVE DIGITAL IMAGE PROCESSING; EARTH SCIENCES; SYSTEM 9000; COASTAL ZONE COLOR SCANNER (CZCS); DIRECT MEMORY ACCESS (DMA); MULTISPECTRAL SCANNER (MSS)

Classification Codes:

723 (Computer Software); 741 (Optics & Optical Devices)

72 (COMPUTERS & DATA PROCESSING); 74 (OPTICAL TECHNOLOGY)

9/5/11 (Item 9 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01772945 E.I. Monthly No: EI8507053636 E.I. Yearly No: EI85020419
Title: GENERAL-PURPOSE MULTI-MICROPROCESSOR RASTER GRAPHICS DISPLAY SYSTEM WITH ANTI-ALIASING.
Author: Piller, Ernst
Corporate Source: Technische Univ Wien, Vienna, Austria
Source: Comput Graphics Forum v 4 n 1 Jan 1985 p 33-41
Publication Year: 1985
CODEN: CGFODY ISSN: 0167-7055
Language: ENGLISH
Document Type: JA; (Journal Article) Treatment: T; (Theoretical)
Journal Announcement: 8507
Abstract: The raster graphics display system described represents a general purpose mini-computer, specially for CAD applications. This system is based on a hierarchical asynchronous multiple microprocessor system. In practice this mini-computer is extendable up to 15-20 workstations. On the workstations, different graphical and non-graphical devices can be connected. The most interesting workstation is a raster graphics display device which was developed specially for the computer system described. This raster graphics **display** device contains a processor for the **application program** , **two** dedicated processors and **two separate** identical **frame buffers** , each of them containing one whole set of image data. Applying algorithms for anti-aliasing, virtual pixel dislocation (intensity dislocation) and multi-pixel-overlappings with hidden line (surface) elimination the image readability and quality can be increased considerably. In particular the paper deals with an anti-aliasing algorithm with a real-time hardware realization. 6 refs.
Descriptors: *COMPUTER GRAPHICS--*Imaging Techniques; COMPUTER AIDED DESIGN; COMPUTERS, MICROPROCESSOR
Identifiers: MULTI-MICROPROCESSOR RASTER GRAPHICS DISPLAY; ANTI-ALIASING; MULTIPLE-PIXEL-OVERLAPPINGS; RASTER SCAN CONVERSION
Classification Codes:
723 (Computer Software)
72 (COMPUTERS & DATA PROCESSING)

9/5/16 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

04195437 INSPEC Abstract Number: C9209-5540-002
Title: Programming on high-resolution mode of VGA
Author(s): Du Shejiao
Author Affiliation: Lab. of Xin-jiang TV Univ., Karamay, China
Journal: Mini-Micro Systems vol.13, no.4 p.55-9
Publication Date: 1992 Country of Publication: China
CODEN: XWJXEH ISSN: 1000-1220
Language: Chinese Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Discusses the programming of a VGA with 512K **display buffers** with high-resolution based on an analysis of its **display buffer** structure. As examples, it describes **two** plot dot **programs** . (2 Refs)
Subfile: C
Descriptors: buffer storage; computer graphic equipment; input-output programs
Identifiers: video graphics adaptor; high-resolution mode; VGA; **display buffers** ; plot dot programs; 512 KB
Class Codes: C5540 (Terminals and graphic displays); C6150E (General utility programs)
Numerical Indexing: memory size 5.24E+05 Byte

9/5/17 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

03350871 INSPEC Abstract Number: B89026909, C89026320
Title: A versatile video image processor
Author(s): Cosby, S.; Leszczynski, K.; Shalev, S.; Reinstein, L.
Author Affiliation: Manitoba Cancer Treatment & Res. Found., Winnipeg, Man., Canada
Conference Title: Electronic Imaging '88: International Electronic Imaging Exposition and Conference. Advance Printing of Paper Summaries p.569-71 vol.1
Publisher: Inst. Graphic Commun, Waltham, MA, USA
Publication Date: 1988 Country of Publication: USA 2 vol. xxxviii+1272 pp.
Conference Sponsor: Diagnostic Imaging Magazine; ESD:Electron. Syst. Design Magazine; et al
Conference Date: 3-6 Oct. 1988 Conference Location: Boston, MA, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Applications (A); Practical (P)
Abstract: An inexpensive image processing system has been developed for routine use with video images. The system is totally self-contained, and consists of a personal computer fitted with a PCVision Plus imaging board, providing 8-bit digitization and **two** 512*480 pixel **frame buffers** . **Software** provides full control over the digitization parameters, and permits feature extraction or contrast enhancement using either operator selection or automatic procedures. The processed image is displayed in pseudo-color on an RGB monitor. Fast global and regional histogram modification routines have been developed for viewing images with low contrast, and most operations can be performed within selected regions-of-interest for added flexibility. The system is simple to use with many automatic features, and is designed for ease of operation by computer-wary personnel. Medical **applications** include **viewing** under- or over-exposed films, film dosimetry, portal film enhancement, compensator plate design, volumetric imaging, and cell or colony counting. (0 Refs)
Subfile: B C
Descriptors: computerised picture processing; medical computing
Identifiers: medical applications; film exposure; cell counting; video image processor; PCVision Plus imaging board; 8-bit digitization; **frame buffers** ; feature extraction; contrast enhancement; operator selection; pseudo-color; RGB monitor; histogram modification routines; selected regions-of-interest; film dosimetry; portal film enhancement; compensator plate design; volumetric imaging; colony counting; 8 bit; 512 pixel; 480 pixel; 240 kpixel
Class Codes: B7510B (Radiation and radioactivity applications); B6140C (Optical information processing); C5260B (Computer vision and picture processing); C7330 (Biology and medicine)
Numerical Indexing: word length 8.0E+00 bit; picture size 5.12E+02 pixel; picture size 4.8E+02 pixel; picture size 2.5E+05 pixel

9/5/18 (Item 5 from file: 2)
DIALOG(R)File 2:INSPEC

03342073 INSPEC Abstract Number: C89027300
Title: Software of the best quality: Smalltalk/V and /V286
Author(s): Sajuk, T.
Journal: Chip no.1 p.84-8
Publication Date: Jan. 1989 Country of Publication: West Germany
CODEN: CHIPDP ISSN: 0170-6632
Language: German Document Type: Journal Paper (JP)
Treatment: Practical (P); Product Review (R)
Abstract: The author reports on tests on **two programs** : Smalltalk/V (for beginners) and Smalltalk/V286 (more complicated) both from Digitalk, California, and costing from 245 DM in their basic form. The Smalltalk programming language was originally an object-orientated system for large and mini computers, uses an image file, a source file and a change-log file and needs an IBM PC/AT or compatible with MS-DOS 2.0 or later (but cannot in fact run on all PCs), 512 kbytes of **RAM** , hard disc, **graphics**

adapter and mouse. The author describes the programs in detail commenting on such aspects as the debugging window, the Dashboard illustration **program** that simulates a car's instrument **panel** , the graphics example **program** and the 'Walkback' window. (0 Refs)
Subfile: C
Descriptors: computer graphics; program debugging; software packages
Identifiers: Smalltalk/V; Smalltalk/V286; Digitalk; Smalltalk programming language; object-orientated system; IBM PC/AT; compatible; MS-DOS 2.0; debugging window; Dashboard illustration program
Class Codes: C6130B (Graphics techniques); C6150G (Diagnostic, testing, debugging and evaluating systems)

9/5/22 (Item 9 from file: 2)
DIALOG(R)File 2:INSPEC

03163089 INSPEC Abstract Number: C88039854
Title: Video and graphics-the twain shall meet
Author(s): Lawcewicz, T.; Wang, R.
Author Affiliation: Imagraph Corp., Woburn, MA, USA
Journal: ESD: The Electronic System Design Magazine vol.18, no.4 p. 55-7
Publication Date: April 1988 Country of Publication: USA
CODEN: EESMEY ISSN: 0147-9245
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P); Product Review (R)
Abstract: Imagraph has developed a Universal Frame Grabber (UFG) that uses a modular approach to image capture and **display** . Designed for medical imaging, geophysical, and LANDSAT **applications** that require frame-rate imaging, the UFG incorporates a proprietary high-speed bus within a PC/AT-compatible architecture. The UFG can digitize NTSC (RS-170), PAL (CCIR), RS-330, and HDTV formats. It offers a variable frame rate buffer, and can support camera resolutions from 256*256 to 1280*1024 pixels. The system can digitize four **different** input video signals; **software** controls all scan rates. Consisting of three boards, the UFG requires two full-length AT card slots to accommodate a digital **frame buffer** (DFB), a digital frame grabber (DFG), and an analog processing module (APM). (0 Refs)
Subfile: C
Descriptors: computer graphic equipment; computer interfaces; computerised picture processing; IBM computers; microcomputer applications
Identifiers: Universal Frame Grabber; image capture; digital **frame buffer** ; digital frame grabber; analog processing module
Class Codes: C5260B (Computer vision and picture processing); C5540 (Terminals and graphic displays)

9/5/24 (Item 11 from file: 2)
DIALOG(R)File 2:INSPEC

02936211 INSPEC Abstract Number: C87048363
Title: Microsoft Windows Software Development Kit
Author(s): Hart, D.L.
Journal: BYTE vol.12, no.6 p.250-2, 254, 256
Publication Date: June 1987 Country of Publication: USA
CODEN: BYTEDJ ISSN: 0360-5280
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P); Product Review (R)
Abstract: The Microsoft Windows Software Development Kit version 1.03 is a set of libraries and utilities that can be used to give an **application** a window-based iconic user **interface** . These libraries let the user create multitasking, device- **independent** **applications** and provide virtual memory management for them. The system also has **two** facilities for giving **programs** the ability to exchange data: the Clipboard and the Dynamic Data Exchange protocol. The development kit is designed to work with the Microsoft Windows operating environment, PC-DOS or MS-DOS 2.0 or

higher, 512 K bytes of **memory** , a graphics monitor, and a **graphics adapter card** , such as a CGA or EGA. (0 Refs)
Subfile: C
Descriptors: computer graphics; software packages; software tools; user interfaces; utility programs
Identifiers: software tools; Microsoft Windows Software Development Kit; utilities; iconic user interface; multitasking; device- **independent applications** ; virtual memory management; Clipboard; Dynamic Data Exchange protocol; operating environment; PC-DOS; MS-DOS 2.0; graphics monitor; graphics adapter card; 512 KBytes
Class Codes: C6115 (Programming support); C6130B (Graphics techniques)
Numerical Indexing: memory size 5.24E+05 Byte

9/5/26 (Item 13 from file: 2)
DIALOG(R)File 2:INSPEC

02270400 INSPEC Abstract Number: C84030286
Title: Quadscreen
Author(s): Arrants, S.
Journal: Creative Computing vol.10, no.3 p.116, 119
Publication Date: March 1984 Country of Publication: USA
CODEN: CCOMDB ISSN: 0097-8140
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Quadscreen enlarges the screen of the IBM PC and gives it the ability to generate a 160 by 64 display-large enough for most spreadsheets. Because of the flexibility of bit-mapped displays, you can control the display information in the exact form you would like it printed. Bit-mapping is also useful in graphics applications. The Quadscreen package contains the Quadscreen monitor, a high-resolution black-and-white screen that measures 17" (diagonal), designed to eliminate screen flicker. Resolution is 968 horizontal dots by 512 vertical lines. Up to 10240 characters can be placed on the screen at any one time. The Quadscreen **video card** contains 128K of dual-ported **RAM** which holds 1024 dot rows, of which any consecutive 512 can be on **screen** at one time. **Two** disks of **software** are provided. One contains the Quadscreen boot **program** and utilities. The **second** contains source code for COM/EXE files. Both disks are unprotected. (0 Refs)
Subfile: C
Descriptors: cathode-ray tube displays; computer graphic equipment
Identifiers: screen enlargement; software disks; Quadscreen; IBM PC; bit-mapped displays; graphics applications; monitor; high-resolution black-and-white screen; screen flicker; video card; dual-ported RAM; boot program; utilities; source code; COM/EXE files
Class Codes: C5540 (Terminals and graphic displays)

9/5/28 (Item 1 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00610149 00PIO9-011
Intense3D Wildcat 4110
Ozer, Jan
PC Magazine , September 1, 2000 , v19 n15 p195-200, 3 Page(s)
ISSN: 0888-8507
Company Name: Intense3D
URL: http://www.intense3d.com
Product Name: Intense3D Wildcat 4110
Languages: English
Document Type: Hardware Review
Grade (of Product Reviewed): B
Geographic Location: United States
Presents a favorable review of Intense3D Wildcat 4110 ($2,000) from Intense3D of Huntsville, AL (877). Explains that it is bundled in third-party workstations from Compaq Computer Corp., Dell Computer Corp.,

and IBM Corp. Cites features such as 64MB SDRAM, 250MHz RAMDAC, integrated geometry processor and raster engine, **separate frame buffer** and texture memory, **application** -specific presets, high-resolution **display** , and top scores on lighting, modeling, data visualization, and industrial-design application tests. Mentions, however, that it is expensive and cannot be bought on its own. Concludes that it is a top-notch product that should appeal to design professionals willing to pay for the very best. On a scale ranging from one to five, received the rating of four. Includes a product summary. (MEM)

Descriptors: Graphics; Accelerator; Computer Aided Design; Animation; Visualization; Simulation; Multimedia

Identifiers: Intense3D Wildcat 4110; Intense3D

9/5/32 (Item 5 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

00351032 94PI06-060

AT&T Telemedia Personal Video System

Alexander, Howard

PC Magazine , June 14, 1994 , v13 n11 p238-241, 2 Page(s)

ISSN: 0888-8507

Company Name: AT&T Global Information Solutions

Product Name: AT&T Telemedia Personal Video System

Languages: English

Document Type: Hardware Review

Grade (of Product Reviewed): A

Hardware/Software Compatibility: IBM PC Compatible; Microsoft Windows

Geographic Location: United States

Presents a very favorable review of AT&T Telemedia Personal Video System ($4,995), a desktop videoconferencing system from AT&T Global Information Solutions of Dayton, OH (800,513). Can come equipped with a 486DX2/66-based AT&T PC with 16MB of **RAM** , 324MB hard disk, a **graphics accelerator** and a monitor for $9,151. Says it is unique in that it has the ability to let **two** users share any Windows **application** . Features it has high video quality and perfectly synchronized with audio. However, sharing parties use only a single cursor in shared **applications** and images cannot be **displayed** simultaneously. Recommended as the PC Magazine Editors' Choice. Includes a photo. (cnr)

Descriptors: Computer Conferencing; Hardware Review; Local Area Networks; Groupware; Video Camera; Workgroup Computing

Identifiers: AT&T Telemedia Personal Video System; AT&T Global Information Solutions

9/5/35 (Item 8 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

00295596 92PX11-030

MicroMagic -- Entertainment

Phillips, Terry F

PCM , November 1, 1992 , v10 n5 p68, 1 Page(s)

ISSN: 0747-0460

Company Name: MicroMagic Productions

Product Name: MicroMagic

Languages: English

Document Type: Software Review

Grade (of Product Reviewed): b

Hardware/Software Compatibility: Tandy; IBM PC Compatible

Geographic Location: United States

Presents a favorable review of MicroMagic ($53, Professional Set), an entertainment/magic software package from MicroMagic Productions of New York, NY (212). Runs on Tandy and IBM PC compatible machines with 256KB of **RAM** , DOS 2.0, a **graphics card** , and a silent keyboard. Says MicroMagic comes with ten sleight-of-hand tricks, and full-sized props including four decks of cards. Also says the **software** is not copy-protected. Includes

two screen images. (t
Descriptors: Entertainment; Software Review
Identifiers: MicroMagic; MicroMagic Productions

9/5/36 (Item 9 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00294145 92HC11-014
GeoWorks Pro
Nimersheim, Jack; Hallerman, David
Home Office Computing , November 1, 1992 , v10 n11 p88, 1 Page(s)
ISSN: 0899-7373
Company Name: GeoWorks
Product Name: GeoWorks Pro
Languages: English
Document Type: Software Review
Grade (of Product Reviewed): C
Hardware/Software Compatibility: IBM PC Compatible
Geographic Location: United States
Presents a mixed capsule review of GeoWorks Pro v1.2 ($199), an integrated software package from GeoWorks (510). Runs on IBM PC compatibles with 512K **RAM** , a hard-disk drive, **graphics adapter** , mouse, and DOS 2.0 or higher. Calls GeoWorks Pro easy to use, and says it has a graphical **interface** , and allows opening **multiple applications** at once. Its modules include on-line communications and a spreadsheet. However, says that the modules are quite basic and have few features. (jo)
Descriptors: Integrated **Software** ; Spreadsheet; User **Interface** ; **Software** Review
Identifiers: GeoWorks Pro; GeoWorks

9/5/37 (Item 10 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00240983 91PI05-023
Freelance Plus
Betts, Kellyn S
PC Magazine , May 14, 1991 , v10 n9 p145, 160, 2 Pages
ISSN: 0888-8507
Languages: English
Document Type: Software Review
Grade (of Product Reviewed): c
Hardware/Software Compatibility: IBM PC; IBM PC Compatible
Geographic Location: United States
Presents a mixed review of Freelance Plus version 3.01 ($495), a presentation graphics package from Lotus Development Corp., Cambridge, MA (617). The program requires 640K **RAM** , a hard disk, a **graphics adapter** , and DOS 3.1 or later. The **program** lacks slide templates and its **menu** system is cumbersome to navigate. It excels in importing and handling data files, it supports named ranges, and it makes working with data from spreadsheets very easy. The drawing tools are capable, but the **program** lacks a WYSIWYG **display** and **displays** text in a typeface like a dot-matrix printers draft mode. Text handling is poor, and editing is difficult because of the program's dependence on arrow keys and the spacebar. The **program** , as reviewed, has **several** strong points but a planned new release, not available for review, is expected to correct most of the major problems in 3.01. Includes one screen display, one illustration. (djd)
Descriptors: Presentation Graphics; Software Review
Identifiers: Freelance Plus; Lotus Development

9/5/39 (Item 12 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00226228 90PI10-138
ImagEdit
Poor, Alfred
PC Magazine , October 16, 1990 , v9 n17 p247-248, 2 Pages
ISSN: 0888-8507
Languages: English
Document Type: Software Review
Grade (of Product Reviewed): c
Hardware/Software Compatibility: IBM PC AT Compatible
Geographic Location: United States
Presents a mixed review of ImagEdit ($570), a gray-scale editing program from IBM Corp., Montvale, NJ (800). The program requires an IBM PC AT or compatible with 640K **RAM** , hard disk, EGA or **VGA graphics adapter** , DOS 3.3 or later, and Microsoft Windows 2.0 or later. The **program** has a special driver to **display** 16 gray shades in VGA. Used with an IBM 8514/A adapter, it **displays** 64 gray shades without requiring a custom driver. The **program** offers a minimal selection of tools but lacks many typical functions such as edge sharpening or smoothing, image cloning, or an airbrush. It has a shade-picker tool, but using it requires an excessive number of steps. It provides only line screen halftoning and supports only TIFF and .EPS graphics formats. At the price, **other programs** offer more features and are easier to use. Includes one **screen** display. (djd)
Descriptors: Image Processing; Editor; Graphics; Desktop Publishing; Software Review
Identifiers: ImagEdit; IBM Corp.

9/5/40 (Item 13 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00222452 90PI08-002
Harvard Graphics 2.3 integrates Draw Partner and adds HyperShow
Simone, Luisa
PC Magazine , August 1, 1990 , v9 n14 p33, 35, 2 Pages
ISSN: 0888-8507
Languages: English
Document Type: Software Review
Grade (of Product Reviewed): c
Geographic Location: United States
Presents a mixed review of Harvard Graphics 2.3 ($495), a presentation graphics **program** from **Software** Publishing Corp., Mountain **View** , CA (415). The **program** requires 512K **RAM** , a hard disk, a **graphics adapter** , and DOS 2.1 or higher. New features in this release include a HyperShow capability, which allows branchi within a slide show to up to ten different screens, but requi separate backward link to return to the base slide. Draw Partner, the drawing facility, can now be accessed from within the **program** as can any **other** DOS **application** . The addition of many new feature has resulted in a program that is more difficult to use, as fun keys work differently depending upon where in the program the is located. The program also includes a Chart Gallery with sample charts which can be selected prior to data entry, a nice feature f novice users. Registered users can upgrade for $75. Includes one screen display. (djd)
Descriptors: Presentation Graphics; Software Review
Identifiers: Harvard Graphics; Software Publishing

9/5/41 (Item 14 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00214888 90PI04-072
PC Globe fits the whole world onto your hard disk
Simon, Barry
PC Magazine , April 10, 1990 , v9 n7 p405-406, 2 Pages
ISSN: 0888-8507
Languages: English

Document Type: Software Review
Grade (of Product Reviewed): b; b
Geographic Location: United States
Presents a favorable review of PC Globe Version 3.0 ($69.95) and PC USA ($69.95), **two** atlas **programs** from PC Globe Inc., Tempe, AZ (800). The programs require 512K **RAM** , a **graphics adapter** , and DOS 2.0. They allow point-and-shoot retrieval of a wide variety of data worldwide and in the U. S., respectively. Data can be displayed for an individual location, or as graphic comparisons for up to 11 locations. Hard copy output is somewhat limited. The program supports the HP LaserJet at 150 dpi and IBM Graphics printers and compatibles, but has no drivers for the Toshiba family or the HP PaintJet, and does not support PostScript. Maps can be saved in .PCX format, but problems were encountered when an attempt was made to load these files into **several** paint **programs** . The minor weaknesses of the programs do not alter the fact that they are ''superb **programs** that make geography come alive.'' Includes two **screen displays** . (djd)
Descriptors: Geography; Software Review
Identifiers: PC Globe; PC USA; PC Globe

9/5/45 (Item 18 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00162372 88IW02-429
PFS First Choice
Crabb, Don
InfoWorld , Feb 29 1988 , v10 n9 p48-49, 46, 3 Pages
ISSN: 0199-6649
Languages: English
Document Type: Software Review
Grade (of Product Reviewed): B
Hardware/Software Compatibility: IBM PC; IBM PC Compatible
Geographic Location: United States
Gives a favorable review of PFS First Choice v. 2.0 ($149), integrated **software** , from **Software** Publishing Inc., Mountain **View** , CA (415). Runs on the IBM PC, XT, AT, and compatibles with DOS 2.0 or later, 256K **RAM** , a **graphics adapter** , and a hard disk (recommended) or **two** floppy drives. Says the **program** is easy to use, but limited. Condsiders it unremarkable and outclassed by other packages. Feels it might be suitable for beginners. Report card: gd-sa-gd-gd-gd-gd-vg-ex-vg-vg-vg-vg-gd -vg. Final score: 7.2. Includes a screen display. (if)
Descriptors: INTEGRATED SOFTWARE; UPGRADE; SOFTWARE REVIEW
Identifiers: PFS:First Choice; Software Publishing

9/5/46 (Item 19 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00145359 87PI06-195
Get the full EGA color spectrum: You can produce a custom color palette for existing software programs that run under the EGA as easily as you can enter SPECTRUM
Hummel, Robert L
PC Magazine , Jun 23 1987 , v6 n12 p311-328, 14 Pages
ISSN: 0745-2500
Languages: English
Document Type: Column
assembly language program; BASIC program
Geographic Location: United States
PC LAB NOTES column presents a graphics utility program that permits existing software to use the EGA's extended color palette. The program is called SPECTRUM and lets a user select 16 out of 64 colors as the default colors. Discusses getting the **program** , using it, screen blanking with it, and how the **program** works. First sidebar concerns downloading the **program** . **Second** sidebar examines **display adapter** evolution. **RAM**

resident utility that allows a user to open a window to any selected memory area. States that this lets a user view the changing of the contents of buffers, flags, and switches as programs run.
Descriptors: UTILITY PROGRAM; COLOR GRAPHICS; PROGRAM LISTING
Identifiers: SPECTRUM; Robert L. Hummel; IBM PC

9/5/47 (Item 20 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00132460 86LS11-006
Reflex: The Analyst
Clark, Philip M
Library Software Review , Nov/Dec 1986 , v5 n6 p354-357, 4 Pages
ISSN: 0278-2634
Languages: English
Document Type: Software Review
Grade (of Product Reviewed): B
Geographic Location: United States
A favorable review of Reflex: The Analyst ($149.95), an analytic database product from Borland International of Scotts Valley, CA. It requires one disk drive, 384K **RAM** , and a **graphics card** and monitor to run on an IBM PC or compatible. Says that it has some of the computational abilities and graphics **display** abilities of an advanced spreadsheet **program** along with the superb data handling abilities of a database manager, has cross-tab ability, is easy to install and use, and allows movement of data to and from **other programs** . Includes one **screen display** .
Descriptors: DATA BASE MANAGEMENT; SOFTWARE REVIEW
Identifiers: Reflex: The Analyst; Borland International; IBM PC; IBM PC Compatible

9/5/48 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

01048220 JICST ACCESSION NUMBER: 90A0387641 FILE SEGMENT: JICST-E
Mapping graphics.
Japan Radio Co., Ltd.
Nippon Musen Giho(JRC Review), 1990, NO.28, PAGE.75, FIG.2
JOURNAL NUMBER: S0137AAD ISSN NO: 0287-1564
UNIVERSAL DECIMAL CLASSIFICATION: 681.3:621.397.3 528:681.3
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Commentary
MEDIA TYPE: Printed Publication
ABSTRACT: Two dimension graphic display with drawing performance of 600000 short vector per second was introduced. It has characteristics such as superspeed display, illustration and unificated and display of an image, large capacity **frame buffer** and scroll **display** , various host **interface** , compatibility of **various** models. It sweeps over **application** field in a diversity such as aqueduct, electric power, gas, telephone, railway, real estate, housing, city planning.
DESCRIPTORS: computer graphics; map compilation; graphic display; information system; data retrieval; photographic image; figure; business form; cadaster(map)
BROADER DESCRIPTORS: image technology; technology; computer application; utilization; plotting; modification; operation(processing); display device; equipment; computer application system; system; fact retrieval; information retrieval; retrieval; image; morphology; resource(document) ; map(atlas); audiovisual material; nonbook material
CLASSIFICATION CODE(S): JE04000X; RC02050O

9/5/51 (Item 2 from file: 6)
DIALOG(R)File 6:NTIS

1479278 NTIS Accession Number: AD-A215 047/2

Pixel-Planes 5: A Heterogeneous Multliprocessor Graphics System Using Processor-Enhanced Memories

Fuchs, H. ; Poulton, J. ; Eyles, J. ; Greer, T. ; Goldfeather, J.

North Carolina Univ. at Chapel Hill. Dept. of Computer Science.

Corp. Source Codes: 045592060; 409668

Jul 89 10p

Languages: English Document Type: Journal article

Journal Announcement: GRAI9006

Pub. in Computer Graphics, v23 n3 p79-88 Jul 89.

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A02/MF A01

Country of Publication: United States

Contract No.: N00014-86-K-0680

This paper introduces the architecture and initial algorithms for Pixel-Planes 5, a heterogeneous multi-computed designed both for high-speed polygon and sphere rendering (1M Phong-shaded triangles/ **second**) and for supporting algorithm and **application** research in interactive 3D graphics. Techniques are described for volume rendering at multiple frames per second, font generation directly from conic spline descriptions, and rapid calculation of radiosity form-factors. The hardware consists of up to 32 math-oriented processors, up to 16 rendering units, and a conventional 1280x1024-pixel **frame buffer** , interconnected by a 5 gigabit ring network. Each rendering unit consists of a 128x128-pixel array of processors-with-memory with parallel quadratic expression evaluation for every pixel. Implemented on 1.6 micron CMOS chips designed to run at 40MHz. This array has 208 bits/pixel on-chip and is connected to a video RAM memory system that provides 4.096 bits of off-chip memory. Rendering units can be independently reassigned to any part of the screen or to non- **screen** -oriented computation. As of April 1989, both hardware and **software** are still under construction, with initial system operation scheduled for fall 1989. Reprints. (RRH)

Descriptors: *Algorithms; *Computations; *Computer programs; *Frames; *Graphics; *Video signals; Conical bodies; Networks; Operation; Parallel orientation; Polygons; Quadratic equations; Random access computer storage; Reprints; Rings; Spheres; Splines; Test and evaluation

Identifiers: NTISDODXR

Section Headings: 62B (Computers, Control, and Information Theory--Computer Software)

9/5/52 (Item 3 from file: 6)

DIALOG(R)File 6:NTIS

1247616 NTIS Accession Number: NTN86-0380

Personal-Computer Video-Terminal Emulator: Video terminal with some 'intelligent' capabilities is emulated

(NTIS Tech Note)

National Aeronautics and Space Administration, Washington, DC.

Corp. Source Codes: 011249000

Apr 86 1p

Languages: English

Journal Announcement: GRAI8617

FOR ADDITIONAL INFORMATION: Contact: Computer Software Management and Information Center, Suite 112, Barrow Hall, Athens, Georgia 30603; (404) 542-3265. Refer to KSC-11293/TN.

NTIS Prices: Not available NTIS

Country of Publication: United States

This citation summarizes a one-page announcement of technology available for utilization. An OWL-1200 video terminal emulator has been written for the IBM Personal Computer. The OWL-1200 is a simple user terminal with some intelligent capabilities. These capabilities include **screen** formatting

and block transmission of data. **Several programs**, such as Systonetics, VISION **software** for hierarchical scheduling, use this type of terminal. This emulator is written in PASCAL and Assembler for the IBM Personal Computer operating under DOS 1.1. Minimum machine requirements include one disk drive, a serial communication board, a color **graphics adapter**, and 128 kbytes of **memory**.

Descriptors: **Software** ; * **Display devices**

Identifiers: *Personal computers; NTN/A; NTISNTND

Section Headings: 62A (Computers, Control, and Information Theory--Computer Hardware); 62B (Computers, Control, and Information Theory--Computer Software)

9/5/53 (Item 4 from file: 6)

DIALOG(R)File 6:NTIS

1245180 NTIS Accession Number: N86-23319/4

Display **System** Software **for the Integration of an Adage 3000 Programmable** Display **Generator into the Solid Modeling Package C.a.D.** Software

(Contractor rept., 26 Sep 84-31 Mar 86)

Montoya, R. J. ; Lane, H. H.

Research Triangle Inst., Research Triangle Park, NC.

Corp. Source Codes: 045968000; RS297520

Sponsor: National Aeronautics and Space Administration, Washington, DC.

Report No.: NAS 1.26:178065; RTI/3052/00-01F; NASA-CR-178065

Mar 86 159p

Languages: English

Journal Announcement: GRAI8616; STAR2413

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A08/MF A01

Country of Publication: United States

Contract No.: NAS1-17890

A **software** system that integrates an ADAGE 3000 Programmable **Display** Generator into a C.A.D. **software** package known as the Solid Modeling Program is described. The Solid Modeling Program (SMP) is an interactive program that is used to model complex solid object through the composition of primitive geometrities. In addition, SMP provides extensive facilities for model editing and display. The ADAGE 3000 Programmable Display Generator (PDG) is a color, raster scan, programmable display generator with a 32-bit bit-slice, bipolar microprocessor (BPS). The modularity of the system architecture and the width and speed of the system bus allow for additional co-processors in the system. These co-processors combine to provide efficient operations on and rendering of graphics entities. The resulting software system takes advantage of the graphics capabilities of the PDG in the operation of SMP by distributing its processing modules between the host and the PDG. Initially, the target host computer was a PRIME 850, which was later substituted with a VAX-11/785. **Two** versions of the **software** system were developed, a phase 1 and a phase 2. In phase 1, the ADAGE 3000 is used as a **frame buffer**. In phase II, SMP was functionally partitioned and some of its functions were implemented in the ADAGE 3000 by means of ADAGE's SOLID 3000 software package.

Descriptors: Computer aided design; *Computer graphics; * **Display** devices; *Distributed processing; Computer **programs** ; Bipolarity; Color; Geometry; Microprocessors

Identifiers: NTISNASA

Section Headings: 62B (Computers, Control, and Information Theory--Computer Software); 41A (Manufacturing Technology--Computer Aided Design (CAD))

9/5/54 (Item 5 from file: 6)

DIALOG(R)File 6:NTIS

1181752 NTIS Accession Number: N85-24805/2
Multimission Image Processing Laboratory's Virtual Frame Buffer **Interface**
Wolfe, T.
Jet Propulsion Lab., Pasadena, CA.
Corp. Source Codes: 014828000; JJ574450
Sponsor: National Aeronautics and Space Administration, Washington, DC.
Report No.: NAS 1.26:175655; JPL-PUBL-84-89; NASA-CR-175655
15 Dec 84 94p
Languages: English
Journal Announcement: GRAI8517; STAR2314
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A05/MF A01
Country of Publication: United States
Contract No.: NAS7-918
Large image processing systems use multiple **frame buffers** with differing architectures and vendor supplied interfaces. This variety of architectures and **interfaces** creates software development, maintenance and portability problems for **application programs** . **Several** machine-dependent graphics standards such as ANSI Core and GKS are available, but none of them are adequate for image processing. Therefore, the Multimission Image Processing laboratory project has implemented a programmer level virtual **frame buffer** interface. This interface makes all **frame buffers** appear as a generic **frame buffer** with a specified set of characteristics. This document defines the virtual **frame buffer** interface and provides information such as FORTRAN subroutine definitions, **frame buffer** characteristics, sample programs, etc. It is intended to be used by application programmers and system programmers who are adding new **frame buffers** to a system.
Descriptors: Buffer storage; *Image processing; * **Interfaces** ; Architecture(Computers); Computer **programs** ; Computer graphics; Computer techniques; Fortran
Identifiers: Application programs(Computers); Computer programming; NTISNASA
Section Headings: 62F (Computers, Control, and Information Theory--Pattern Recognition and Image Processing)

9/5/55 (Item 1 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)

02940035
IMAGESYSTEMS OFFERS IMAGING BOARD
US - IMAGESYSTEMS OFFERS IMAGING BOARD
EDN Magazine (EDNM) 1 September 1989 p174
ISSN: 0012-7515

Imagesystems is offering an image-processing board, called Gemini, for the IBM PC/AT and compatible computers, costing from USDlr3995 for board and software. It contains a TMS320C25 digital signal processor (DSP), which can operate independently of the TMS34010 graphics system processor (GSP). The board has 2M bytes of annotation memory, 2M bytes of main memory, multiple look-up tables, a 256K-byte **display buffer** and a further 128k bytes for graphics overlay. It can also perform bitblt in hardware which can transfer image data at 5M bytes/sec into the **display buffer** , and includes IWindows **software** , which uses windows to overlap **multiple** images.

PRODUCT: Micrographic Equipment (3861MG);
EVENT: PRODUCTS, PROCESSES & SERVICES (30);
COUNTRY: United States (1USA); NATO Countries (420); South East Asia Treaty Organisation (913);

```
File 275:Gale Group Compu[redacted] DB(TM) 1983-2003/Nov 04
         (c) 2003 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Nov 05
         (c) 2003 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2003/Nov 04
         (c) 2003 The Gale Group
File  16:Gale Group PROMT(R) 1990-2003/Nov 04
         (c) 2003 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2003/Nov 05
         (c)2003 The Gale Group
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         (c) 2003 McGraw-Hill Co. Inc
File  15:ABI/Inform(R) 1971-2003/Nov 05
         (c) 2003 ProQuest Info&Learning
File 647:CMP  Computer Fulltext 1988-2003/Sep W3
         (c) 2003 CMP Media, LLC
File 674:Computer News Fulltext 1989-2003/Nov W1
         (c) 2003 IDG Communications
File 696:DIALOG Telecom. Newsletters 1995-2003/Nov 04
         (c) 2003 The Dialog Corp.
File 369:New Scientist 1994-2003/Oct W4
         (c) 2003 Reed Business Information Ltd.
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 613:PR Newswire 1999-2003/Nov 05
         (c) 2003 PR Newswire Association Inc
File 610:Business Wire 1999-2003/Nov 05
         (c) 2003 Business Wire.
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc

Set     Items   Description
S1     156392   (VIDEO OR GRAPHICS OR DISPLAY OR VGA OR SVGA OR 3D)(1W)(CA-
              RD? ? OR BOARD? ? OR CONTROLLER? ? OR ADAPTER? ? OR ACCELERAT-
              OR? ?)
S2      28137   S1(5N)(BUFFER? ? OR MEMORY OR MEMORIES OR RAM) OR DISPLAY(-
              )BUFFER? ? OR FRAME()BUFFER? ? OR FRAMEBUFFER? ?
S3    6489672   INTERFACE? ? OR PANE? ? OR GUI? ? OR LAYOUT? ? OR SCREEN? ?
               OR MENU? ? OR TOOLBAR? ? OR TOOL()BAR? ? OR DISPLAY? OR VIEW-
              ???
S4    1008345   S3(10N)(APPLICATION? ? OR PROGRAM? ? OR SOFTWARE)
S5    2258982   (DIFFERENT OR SEPARATE OR ANOTHER OR OTHER OR MULTIPLE OR -
              MULTIPLICITY OR PLURAL OR DUAL? OR SECOND OR 2ND OR TWO OR VA-
              RIOUS OR ASSORT? OR SEVERAL OR INDEPENDENT)(5N)(APPLICATION? ?
               OR PROGRAM? ? OR SOFTWARE)
S6        281   S2(S)S4(S)S5
S7     667301   S3(5N)(APPLICATION? ? OR PROGRAM? ? OR SOFTWARE)
S8        172   S2(S)S7(S)S5
S9        126   RD (unique items)
S10        98   S9 NOT PD>20000322
S11       564   S2(20N)S7
S12       110   S11(S)S5
S13        71   RD (unique items)
S14        56   S13 NOT PD>20000322
```

14/3,K/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02368647 SUPPLIER NUMBER: 59161358 (USE FORMAT 7 OR 9 FOR FULL TEXT)
FreeForm. (SensAble Technologies' FreeForm modeling package) (Software Review) (Evaluation)
DEFEO, MICHAEL
Computer Graphics World, 23, 1, 61
Jan, 2000
DOCUMENT TYPE: Evaluation ISSN: 0271-4159 LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 786 LINE COUNT: 00065

... design, and entertainment. Nothing else on the market attempts what SensAble is trying to do for the modeling industry.
FreeForm
PRICE: $15,000 (includes haptic **interface** and modeling **software**)
MINIMUM SYSTEM REQUIREMENTS: **Dual** Pentium II 300MHz processors; 512MB of RAM; Windows NT 4.0 SP4; high-end **graphics card** with 32MB of **RAM** ; hardware-based OpenGL acceleration.
SensAble Technologies
Cambridge, MA 617:621-0150 www.sensable.com infoNOW 46
Michael DeFeo is a senior modeler with Blue Sky...

14/3,K/2 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02330099 SUPPLIER NUMBER: 55723023 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Top vendors offer new Pentium III systems. (Compaq, Dell, HP, Intergraph, Micron and NEC introduce 600MHz Pentium III-based systems) (Product Announcement)
MENKE, SUSAN M.
Government Computer News, 18, 29, 40
Sept 6, 1999
DOCUMENT TYPE: Product Announcement ISSN: 0738-4300 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 401 LINE COUNT: 00032

... has put the 600-MHz Pentium III into all its lines of Vectra PCs, Kayak workstations and NetServers. The Kayak models have a Matrox Millennium **graphics** accelerator with 16M of video **RAM** that can support two **displays** . The user can run **separate applications** on the monitors or show **multiple** screens of the same app.
A Kayak XU minitower with 128M of RAM, a 9.1G hard drive, a 32X CD-ROM drive and NT...

14/3,K/3 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01983876 SUPPLIER NUMBER: 18602937 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Talisman redefines 3D rendering; new Microsoft architecture trades precision for speed. (includes related article on sources for more information) (Company Business and Marketing)
Glaskowsky, Peter N.
Microprocessor Report, v10, n11, p8(3)
August 26, 1996
ISSN: 0899-9341 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 2542 LINE COUNT: 00204

... possibly by presenting a static or low-resolution image while allowing two or three frame times for Talisman to catch up.
The absence of a **frame buffer** also prevents the use of **other** classic **display** techniques. **Software** that depends on being able to read

the **frame buffer** (like remote-control programs) will not work correctly. Adding support for a frame buffer in addition to the compositing circuitry will solve this problem and...

14/3,K/4 (Item 4 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01950161 SUPPLIER NUMBER: 18409335 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Rewrite the future with your PC. (Compaq Presario 9240) (Hardware Review) (Evaluation)
O'Brien, Bill
Computer Shopper, v16, n7, p363(2)
July, 1996
DOCUMENT TYPE: Evaluation ISSN: 0886-0556 LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1268 LINE COUNT: 00112

... a 1.2GB Conner Enhanced IDE hard drive; sound and graphics integrated into the motherboard; and a 28.8Kbps data/fax/voice modem.

The Trio64V+ **graphics** accelerator, shipped with 2MB of **memory** , is complemented by Compaq's 1510 multiscanning monitor, a 15-inch **display** with removable speakers. **Software** includes Windows 95 and 29 **other** titles.

PD-CD DRIVE

The PD-CD drive combines the functions of a CD-ROM reader and a Compaq-rated 650MB rewritable optical drive in...

14/3,K/5 (Item 5 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01778897 SUPPLIER NUMBER: 16864176 (USE FORMAT 7 OR 9 FOR FULL TEXT)
HP Color Recovery technology. (for low-cost color image display) (Technical)
Barkans, Anthony C.
Hewlett-Packard Journal, v46, n2, p51(9)
April, 1995
DOCUMENT TYPE: Technical ISSN: 0018-1153 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 6949 LINE COUNT: 00511

... feature finding and image enhancement.

* Feature finding. Most feature-finding applications are based on edge detection. The results of running one of these types of **applications** can be **displayed** using HP Color Recovery. However, as with **other** dithered **frame buffers** , any **application** using the **frame buffer** as the image source may have problems if it does not account for the dither.

* Image enhancement. Image enhancement applications are typically used to enhance...

14/3,K/6 (Item 6 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01674957 SUPPLIER NUMBER: 15102669 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Development of a multimedia product for HP workstations.
Rose, Gary P.; Oesterle, Jeffery T.; Kasper, Joseph E.; Hammond, Robert J.
Hewlett-Packard Journal, v45, n2, p6(4)
April, 1994
ISSN: 0018-1153 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 3133 LINE COUNT: 00249

... image and audio. We asked customers about their imaging needs and found that while computers could display images, users typically had to run them through **several** conversion steps before their **display program**

could put the image on the screen. Among graphics products there was a wide range of image formats and **frame buffer** pixel depths. This made image display inconsistent from machine to machine. Another problem was that the screen would turn funny colors when more than one...

14/3,K/7 (Item 7 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01521366 SUPPLIER NUMBER: 12212416 (USE FORMAT 7 OR 9 FOR FULL TEXT)
A better view of Windows: 17-inch displays. (Microsoft Windows-compatible monitors) (includes related articles on Editors' Choice, on performance tests and on evaluation highlights) (Hardware Review) (overview of 16 17-inch color monitor evaluations) (Cover Story) (Evaluation)
Rist, Oliver
PC Magazine, v11, n12, p113(23)
June 30, 1992
DOCUMENT TYPE: Evaluation ISSN: 0888-8507 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 7191 LINE COUNT: 00542

... the same function.
EDITORS' CHOICE
* MAG MX17F * Nanao Flexscan F550i
To get the most out of Microsoft Windows, you need a fast processor, lots of **RAM** , a big hard disk, a **graphics accelerator board** , and a larger screen. A 14-inch display is not going to be adequate when you need **multiple** Windows **applications** on- **screen** at the same time. A 17-inch monitor provides 45 to 60 percent more viewing area than its 14-inch counterpart, and that translates into...

14/3,K/8 (Item 8 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01520564 SUPPLIER NUMBER: 12324087 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Evaluator v. 3.1: Eastern Systems Inc. (Software Review) (one of 11 software testing tools evaluated in When You Need a Bigger Hammer) (Product Wrap-Up) (Evaluation)
Murphy, Thomas
Computer Language, v9, n7, p76(1)
July, 1992
DOCUMENT TYPE: Evaluation ISSN: 0749-2839 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 572 LINE COUNT: 00043

...ABSTRACT: Systems Inc's Evaluator version 3.1 hardware- and software-based system uses a host machine that communicates with the target machine through a proprietary **interface** card. The test **software** runs on the host, which taps into the keyboard and mouse lines with splitter cables and grabs **frame buffers** ; the interface card replaces the VGA adaptor in the target machine. Software can be tested running in DOS, OS/2, UNIX, Windows and other environments, and the same tests can be used to verify versions of **programs** ported from one environment to **another** . The learn facility in the product is a capture-and-playback system that creates tests without programming; tests can be grouped together into a batch...

14/3,K/9 (Item 9 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01496488 SUPPLIER NUMBER: 11718920 (USE FORMAT 7 OR 9 FOR FULL TEXT)
When bigger is better, Quadzilla quadruples your display space. (STB Systems Inc.'s MVP-VGA Quadzilla adapter) (Hardware Review) (Evaluation)
van Kirk, Doug

PC-Computing, v5, n2, p68(
Feb, 1992
DOCUMENT TYPE: Evaluation ISSN: 0899-1847 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 429 LINE COUNT: 00030

...ABSTRACT: VGA adapter card that drives four monitors at once with up to 1,024-by-768 resolution. The design of the card includes four Super **VGA adapters** , each with 1Mbyte of **RAM** , on one card, with software that allows either OS/2 or Microsoft Windows 3.0 **application displays** to be shown across four monitors. Users can combine as many as four Quadzillas in one microcomputer for a really monstrous 16-monitor display. Quadzilla is useful for either displaying one application across the screen or showing four **separate applications** . Users can customize the display shown by writing MS-DOS applications. Few users will need the power of Quadzilla, but for meetings, conference rooms and...

14/3,K/10 (Item 10 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01385985 SUPPLIER NUMBER: 09650035 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Pinpointing system bottlenecks. (slow microcomputer performance) (Software)
Poor, Alfred
PC Sources, v1, n10, p63(2)
Oct, 1990
ISSN: 1052-6579 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1515 LINE COUNT: 00118

... In contrast, database programs, such as dBase, keep nearly all data on disk and are constantly reading and writing in response to your requests.

Similarly, **different applications** place **different** types of demands on your components. Graphics and desktop publishing programs respond better with faster **memory** and **display adapters** . Computer-aided design **programs** rely on complex mathematical calculations and often benefit from a math coprocessor's help.

Armed with an understanding of where your system may be slowing...

14/3,K/11 (Item 11 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01383420 SUPPLIER NUMBER: 09615267 (USE FORMAT 7 OR 9 FOR FULL TEXT)
ESDI drives boost disk transfer rate: disk controller must be compatible with disk drive's transfer rate. (Enhanced Small Device Interface) (buyers guide)
Myers, Ben
PC Week, v7, n46, p155(3)
Nov 19, 1990
DOCUMENT TYPE: buyers guide ISSN: 0740-1604 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1328 LINE COUNT: 00100

... may conflict with the BIOS on another card. The ability to disable the disk BIOS is important in situations where the disk BIOS conflicts with **other software** or hardware, such as network **interface** cards, **video cards** , and 386 **memory** managers, and LIM EMS. Usually there is a jumper on the controller to disable the BIOS, removing it from memory.

Until PC users' hard-disk...

14/3,K/12 (Item 12 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01378928 SUPPLIER NUMBER: 09573253 (USE FORMAT 7 OR 9 FOR FULL TEXT)
3 technologies vie for graphics crown. (Super VGA, IBM 8514/A, TIGA high-resolution graphics systems) (buyers guide)
Myers, Ben
PC Week, v7, n44, p147(3)
Nov 5, 1990
DOCUMENT TYPE: buyers guide ISSN: 0740-1604 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1697 LINE COUNT: 00133

... development tools: compilers, linkers and debuggers. This is entirely appropriate for a general-purpose graphics engine also used by printers, faxes, scanners, imaging products and **other** graphics devices.

The **software** interface for TIGA is also open-ended and extensible. Graphics hardware designers can add to the existing 167 functions in the TIGA **application** programming **interface** by downloading **software** to the **memory** on a TI 34000-based **graphics board** . Though lending great flexibility to video graphics, this creates software incompatibilities among TIGA boards.

For the last several years, the TI 340 video marketplace has...

14/3,K/13 (Item 13 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01354355 SUPPLIER NUMBER: 08316084 (USE FORMAT 7 OR 9 FOR FULL TEXT)
New and improved.
Ross, Matthew J.
PC Magazine, v9, n9, p53(4)
May 15, 1990
ISSN: 0888-8507 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 2083 LINE COUNT: 00177

... starting at $15,360, plus monthly licensing fees. IBM Corp.; (800) IBM-2468.

AGA 1024--Desktop Computing has added the DGIS interface and drivers for **several** popular **software** packages to its Advanced Graphics Accelerator--the AGA 1024 video graphics adapter. The AGA 1024 already emulates IBM 8514/AI and the Texas Instruments TIGA standards. The Direct Graphics Interface Standard (DGIS) is a board-level **software interface** that resides in the local **memory** of intelligent **graphics controllers** . While it requires drivers for individual **applications** , the DGIS **interface** supports **several applications** not currently available through the 8514/A and TIGA video standards. Desktop

Computing's DGIS drivers include support for Microsoft Windows/286 and /386, CGI...

14/3,K/14 (Item 14 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01346217 SUPPLIER NUMBER: 08060812 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Wyse Technology WY-7190. (Hardware Review) (one of 14 paper-white monitor evaluations in 'Now showing on the big screen ....') (evaluation)
Poor, Alfred
PC Magazine, v9, n3, p220(2)
Feb 13, 1990
DOCUMENT TYPE: evaluation ISSN: 0888-8507 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 725 LINE COUNT: 00053

...ABSTRACT: a TI 34010 graphics coprocessor, which speeds performance by offloading display processing from the CPU, and 512Kbytes of DRAM in addition to 256Kbytes of video **RAM** . Configuring the **display card** is easy, and **software** support is good; Wyse provides drivers for WordPerfect, Microsoft Word, AutoCAD, and **several other** CAD **programs** .

Installing the drivers is fairly easy but is not automatic. The WY-7190 produces a crisp, clear display with easy-to-read text. Benchmark tests...

14/3,K/15 (Item 15 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01344302 SUPPLIER NUMBER: 07943230 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Midisoft Studio: sequencer runs under GEM GUI. (Graphical user interface) (product announcement)
Bassett, Rick
PC Magazine, v9, n1, p404(2)
Jan 16, 1990
DOCUMENT TYPE: product announcement ISSN: 0888-8507 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 1221 LINE COUNT: 00092

... the GEM interface, this could be a good program for you. The full GEM environment is included with Studio, so you can use the graphical **interface** with **other** GEM-compatible **applications** .
List Price: Midsoft Studio, Standard Edition, Version 1.01, $129; Advanced Edition, $199.
Requires: 640K **RAM** , **graphics adapter** , Roland MPU-401 or compatible MIDI interface, DOS 2.0 or later. Mouse highly recommended. Midsoft Corp., P.O. Box 1000, Bellevue, WA 98009; (206...

14/3,K/16 (Item 16 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01310122 SUPPLIER NUMBER: 07584290 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Digital palettes. (includes related article explaining the varieties of paint programs) (overview of five Macintosh 8-bit color paint programs evaluations) (evaluation)
Parascandolo, Salvatore
MacUser, v5, n10, p93(12)
Oct, 1989
DOCUMENT TYPE: evaluation ISSN: 0884-0997 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 260 LINE COUNT: 00019

...ABSTRACT: 595 PixelPaint and the $495 Studio/8 came out ahead in all categories. The weaknesses of one program is balanced by the strengths of the **other** and both **programs** elicited very few negative comments from the students. Modern Artist, priced at $499, and Photon Paint, priced at $299, received more complaints, mostly concerning the **program interfaces** and the poor documentation and implementation. All programs require a Mac II with a 256-color **graphics board** , 2Mbytes **RAM** and two 800K drives. A hard drive is recommended.

14/3,K/17 (Item 17 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01280142 SUPPLIER NUMBER: 07560242
Tools test: Omni Lab. (Hardware Review) (evaluation)
Gabay, Jon
Electronic Engineering Times, n545, p31(3)
July 3, 1989
DOCUMENT TYPE: evaluation ISSN: 0192-1541 LANGUAGE: ENGLISH
RECORD TYPE: ABSTRACT

...ABSTRACT: standard IBM PC/XT or AT through a plug-in card and 40-pin ribbon cable. One special feature is the ability to time-align **displays** from **different** sources. Powerful graphics **software** is also included in

the package. System requirements include an IBM PC/XT, AT or compatible machine, 640Kbytes **RAM** , Hercules, EGA or VGA **display** and **adapter** . Hard disk, mouse and printer are recommended. Also featured are analog displays, state diagrams and stimulus generation.

14/3,K/18 (Item 18 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01254169 SUPPLIER NUMBER: 06935369 (USE FORMAT 7 OR 9 FOR FULL TEXT)
PagePerfect: good features outweighed by bad mechanics. (includes related article on marketing position of PagePerfect) (Software Review) (evaluation)
Tietjen, Ramsey
Computer & Software News, v6, n33, p47(2)
Aug 15, 1988
DOCUMENT TYPE: evaluation ISSN: 0745-5291 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1894 LINE COUNT: 00149

ABSTRACT: IMSI Inc's $495 PagePerfect is a combination word processing and page **layout** package for IBM computers. The **program** requires all 640Kbytes available, plus about 8Mbytes of hard disk space, an EGA or **VGA adapter** , extended **memory** if graphics are used, and should be run on 80386-based machines. The program supplies: the Desktop Publisher's Graphics editor; a WYSIWYG display; a...

...abilities. PagePerfect does not support PostScript; has no mail merge or database publishing facility; does not flow text around graphics or import them easily from **other programs** ; and does not create footnotes, tables of contents, or indexes. The program is also difficult to learn. PagePerfect could use pull-down menus, better cursor...

14/3,K/19 (Item 19 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01211824 SUPPLIER NUMBER: 04812946 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Graphics interfaces support diverse standards.
Rosch, Winn L.
PC Week, v4, n19, p82(2)
May 12, 1987
ISSN: 0740-1604 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1608 LINE COUNT: 00130

... than do the others. "DGIS is a board-level programmer interface," said Mr. Fineberg, whose company developed DGIS. "It is code that sits on a **video board** either in ROM or **RAM** and provides an **interface** for programmers who want their **applications software** to run on that board." **Another** such board-level interface that may achieve some degree of standardization, if just from the reputation of its manufacturer, is that used by IBM's...

14/3,K/20 (Item 20 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01209458 SUPPLIER NUMBER: 04700898 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Multilevel debugger. (Microsoft Corporation's CodeView)
Ackerman, Mark S.
PC Tech Journal, v5, n3, p90(7)
March, 1987
DOCUMENT TYPE: evaluation ISSN: 0738-0194 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 5488 LINE COUNT: 00433

... back into the buffer, and the CodeView screen is copied into display memory. This procedure causes the display to jump back and forth between the **application** and CodeView **screen** in a disconcerting manner.

With the CGA and EGA, CodeView uses two display pages in the **video adapter memory** : one for itself and the **other** for the **program** output. It flips between the **two** pages whenever the **program** is started, producing a much smoother transition between screens. The EGA also can be used in 43-line mode. The greater number of lines on...

14/3,K/21 (Item 21 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01208712 SUPPLIER NUMBER: 05031359 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Detecting display systems. (selecting the right combination of display adapters and monitors)
Hansen, Augie
PC Tech Journal, v5, n7, p174(9)
July, 1987
DOCUMENT TYPE: column ISSN: 0738-0194 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1724 LINE COUNT: 00131

CAPTIONS: Acceptable adapter-display combinations. (table); Video modes. (table); Dual display use. (table); **Display adapter memory** allocations. (chart); Sample DSPYINFO output. (chart); Using the BIOS equipment flags. (chart); **Two programs** demonstrate automatic hardware **display** selection. (chart)

14/3,K/22 (Item 22 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01208708 SUPPLIER NUMBER: 05031355 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Exploiting the 3270 connection. (writing microcomputer applications that connect directly with mainframes through 3270 communication channels)
DeWolf, Mary
PC Tech Journal, v5, n7, p94(8)
July, 1987
ISSN: 0738-0194 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 4792 LINE COUNT: 00374

... functions of a 3278 while maintaining dependence on the cluster controller. See figure 1.

From the created PC application's viewpoint, this environment is very **different** from an asynchronous communications **program** . Instead of building a message in PC memory, the PC program simulates keystrokes (including the Enter key). Instead of receiving a host response, the **program** monitors the **display buffer** . The board emulates the 3278 terminal, but the application emulates the 3278 terminal operator. By so doing, the PC application is able to exchange data...

14/3,K/23 (Item 23 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01205825 SUPPLIER NUMBER: 04655434 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Display adapter bottleneck. (display adapter demands on video RAM can limit graphics performance)
Abrash, Michael
PC Tech Journal, v5, n1, p104(12)
Jan, 1987
ISSN: 0738-0194 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 4355 LINE COUNT: 00329

...ABSTRACT: display adapter circuitry and the processor. Two causes for the AT display-memory bottleneck are the use of wait states and the 8-bit-wide **memory** organization on all popular **video adapters** . The AT does not offer the expected performance increase compared with the XT in terms of graphics processing for **display** -oriented **applications** . Graphics performance will continue to be considered a major weak point of the AT until 16-bit display adapters or adapters with dedicated coprocessors are...

...more frequently. The need is most obvious when the growing number of bit-mapped graphics interfaces becoming available that require AT-class performance are considered. **Two programs** are listed that improve the performance of display adapters: BOTTLE1.C, compiled with Microsoft C compiler 4.0; and BOTTLE2.ASM, assembled with Microsoft Macro...

14/3,K/24 (Item 24 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01177258 SUPPLIER NUMBER: 04366693 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Hercules offers greater potential ability on its successor to the Graphics Card. (Hardware Review) (evaluation)
Ray, Garry
PC Week, v3, n35, p83(3)
Sept 2, 1986
DOCUMENT TYPE: evaluation ISSN: 0740-1604 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1895 LINE COUNT: 00143

...ABSTRACT: graphics, using 64Kbytes of video address space above the 640Kbyte DOS address space (4Kbytes of which is used for text mode), and providing hardware and **software** compatibility with the old card. **Two** new modes included in the Plus version are 4Kbyte and 48Kbyte RamFonts, which allow the full 64Kbytes of display memory to be used for text-mode **applications** , the first a text-mode **display buffer** using character sets stored in a 4Kbyte block of RAM, and the **second** allowing **programs** to have as many as 3,096 characters of different sizes, shapes and typefaces. **Two** new **programs** are also included for manipulating the new RamFont modes, and drivers for popular applications packages, including release 2 of Lotus Development's 1-2-3...

14/3,K/25 (Item 25 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01169473 SUPPLIER NUMBER: 00661530
A CADD solution.
Wright, Victor E.
PC Tech Journal, v4, n3, p86-87
March, 1986
DOCUMENT TYPE: evaluaton ISSN: 0738-0194 LANGUAGE: ENGLISH
RECORD TYPE: ABSTRACT

...ABSTRACT: automatic dimensioning, hatching, layering, symbols, macros and database extraction. The package is intended to run on IBM PC XTs, ATs and compatibles with 512Kbytes of **RAM** , serial and parallel ports, a **graphics card** , a suitable monitor and a hard disk, and is a **menu** -driven **program** with selections entered through a pointing device or a keyboard, with both mice and digitizers supported. The extensive evaluation of the package was done on **several different** hardware configurations, and the **program** 's drawing primitives, editing methods, file management, symbol libraries, macro facilities and database extraction functions are described and evaluated. CADVANCE will be most welcome for...

14/3,K/26 (Item 26 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01160715 SUPPLIER NUMBER: 04768816
In the eye of the FEM. (Software Review) (evaluation)
Drift Wight, Jennifer
Computer Graphics World, v9, n11, p55(4)
Nov, 1986
DOCUMENT TYPE: evaluation ISSN: 0271-4159 LANGUAGE: ENGLISH
RECORD TYPE: ABSTRACT

...ABSTRACT: being used by Optical Radiation Corporation to produce interocular lenses. The lenses, used prevent blindness from cataracts, are from the design to production stage in **two** weeks or less. The **program** runs on personal computers with PC-DOS, 512K **RAM** , color **graphics card** , hard disk drive, and 8027 or 80287 numeric coprocessor. The lens designers use the **menu** -driven **software** to consider eye tissue, optical materials, and the loops that attach the lens to the eye.

14/3,K/27 (Item 1 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2003 The Gale Group. All rts. reserv.

01809004 Supplier Number: 53888192 (USE FORMAT 7 FOR FULLTEXT)
EPSON's New Graphics Controller, Featuring Hardware Rotation and 80KB Embedded Memory, Provides Single-chip Graphics Solution Perfect for Color Palm-size PCs.
Business Wire, p0024
Feb 16, 1999
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 368

The SED1375 is a color/monochrome LCD graphics controller with an embedded 80Kbyte SRAM **display buffer** . Designed for use in Windows CE(TM) hand-held PCs and **other** small, embedded **applications** with color LCD **display** , the new controller features double the on-chip memory over Epson's SED1374 controller. This additional memory enables the SED1375 to support up to quarter...

14/3,K/28 (Item 2 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2003 The Gale Group. All rts. reserv.

01195430 Supplier Number: 43082361 (USE FORMAT 7 FOR FULLTEXT)
MICROFIELD DEBUTS COLOR GRAPHICS CONTROLLER TO OPTIMIZE SYSTEM PERFORMANCE IN MULTITASKING WINDOWED ENVIRONMENTS
News Release, p1
June 17, 1992
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 928

... a family of intelligent graphics controllers offered by Microfield, a recognized technology leader in high-performance PC graphics.

X8 Alleviates Demands made of Host Resources, **Application** Performance
and **GUI** Response by **other** X Server Implementations

Unlike local bus **frame buffers** or **frame buffer** accelerators (i.e.
S3,8514, XGA) that require the 486 or PS to perform graphics tasks in addition to its central processing tasks, the X8...

14/3,K/29 (Item 3 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01119040 Supplier Number: 40907049 (USE FORMAT 7 FOR FULLTEXT)
Personal Computers Gain New High-Resolution Image Processor
News Release, p1
August 21, 1989
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1112

... processing.

The VSI-150/151-1K Variable-Scan Interface allows acquisition of 1024 x 1024 images at a maximum rate of 20 million pixels per **second** . Based on the **application** , the VSI-150/151-1K **interfaces** with high-resolution area arrays, line scan cameras, and digital output devices.

The FB-150/151-1K **Frame Buffer** provides four megabytes of image storage organized as one 1024 x 1024 x 16-bit frame store and two 1024 x 1024 x 8-bit...

14/3,K/30 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)

03242803 Supplier Number: 46651723 (USE FORMAT 7 FOR FULLTEXT)
Talisman Redefines 3D Rendering; New Microsoft Architecture Trades Precision for Speed by Peter N. Glaskowsky
Microprocessor Report, v10, n11, pN/A
August 26, 1996
Language: English Record Type: Fulltext
Document Type: Newsletter; Refereed; Trade
Word Count: 2364

... possibly by presenting a static or low-resolution image while allowing two or three frame times for Talisman to catch up.

The absence of a **frame buffer** also prevents the use of **other** classic **display** techniques. **Software** that depends on being able to read the **frame buffer** (like remote-control programs) will not work correctly. Adding support for a frame buffer in addition to the compositing circuitry will solve this problem and...

14/3,K/31 (Item 2 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)

02644405 Supplier Number: 45355067 (USE FORMAT 7 FOR FULLTEXT)
SUNDANCE EXTENDS IMAGE PROCESSING LINE WITH TWO NEW DSP TIM-40 MODULES
M2 Presswire, pN/A
Feb 24, 1995
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 574

... C40 DSP. The program/data store on the frame grabber and graphics accelerator modules consists of 16M bytes of DRAM and 1Mbyte of fast static **RAM** .

Graphics accelerator The SMT304 **graphics accelerator** provides a powerful user **interface** for image processing and **other applications** . The size 2 TIM modules combine a C40 DSP with a Weitek PowerW9 100 graphics controller. The W9100 comprises a full VESA local bus interface...

14/3,K/32 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

04015270 Supplier Number: 45834029 (USE FORMAT 7 FOR FULLTEXT)
Breathing New Life Into Old Apps; GUISys puts a pretty face on AS/400 and mainframe applications-without rewrites
InformationWeek, p73
Oct 2, 1995
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Tabloid; General Trade
Word Count: 1789

... locally on their PCs. Then, when they run our application on the AS/400 host, they see our product on their PC looking like any **other** Windows **application** . They can navigate through the rejuvenated Mapics application just as they would through any **other** **GUI** -based **application** .

To use the .EXE file created by GUISys/400, our customers need only a 486 computer, 8 Mbytes of **RAM** , **SVGA** **video** **card** , and Windows 3.1 and 5250 terminal-emulation **software** .

Visual Basic **Screens**

At Marcam, we also use Client/Server Technology's add-on product, VBSys, which generates Microsoft Visual Basic 3.0 forms. VBSys versions are available...

14/3,K/33 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

03436683 Supplier Number: 44788085 (USE FORMAT 7 FOR FULLTEXT)
Mixing graphics and video poses design challenges
Electronic Engineering Times, p55
June 27, 1994
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1530

... it and sends the frames across the I/O bus to the video card. On the graphics card, the video images are stored in the **frame** **buffer** along with any information being **displayed** (e.g., **other** Windows **applications**). Still frames are transferred to the **frame** **buffer** at the frame rate, ideally 30 frames/s. The entire contents of the frame buffer (video and background) are copied through the RAMDAC to refresh...

14/3,K/34 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

01209423 Supplier Number: 41391865 (USE FORMAT 7 FOR FULLTEXT)
PERSONICS CORP.
Computer Reseller News, p98
June 18, 1990
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 152

The upgrade includes support for **VGA** **video** **adapters** , a **memory** resident color changer that works within text and graphics **applications** , 20 additional **screen** fonts and support for an increased number of **software** **programs** .

Other features in Ultravision 2.0 include the ability to display more than the standard 80 x 25 characters usually available on a display. This enables...

14/3,K/35 (Item 1 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)

02144883
Solbourne Announces the First Compatible Workstations
News Release January 16, 1989 p. 1

Solbourne Computer, Inc. today announced the first workstations of any type to be **software** compatible with those of **another** major vendor--they can run the same programs as Sun Microsystems Inc.'s Sun-4 (TM) series of superworkstations. The processors employ Sun's SPARC...

... NFS (TM) (Network File System) and ONC(TM) (Open Network Computing) for networking and remote program execution. The Series4 models emulate the Sun-4 standard **frame buffer** to provide graphics compatibility. Sun's Pixrects graphics library provides the necessary graphics **software interface** .

14/3,K/36 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

11990871 SUPPLIER NUMBER: 61573040 (USE FORMAT 7 OR 9 FOR FULL TEXT)
DRAMs: bigger, faster, and wider.(from Hyundai and Samsunf)(Company Business and Marketing)(Brief Article)
Dipert, Brian
EDN, 45, 6, 26
March 16, 2000
DOCUMENT TYPE: Brief Article ISSN: 0012-7515 LANGUAGE: English
RECORD TYPE: Fulltext
WORD COUNT: 147 LINE COUNT: 00015

TEXT:
THE TREND TOWARD DRAMs tailored for **applications other** than PC main memory continues with Hyundai's and Samsung's latest 64-Mbit SDRAMs. The memories' 32-bit data buses decrease the required system-memory granularity for graphics **frame buffers** and **other** embedded **applications** . Double-data-rate **interfaces** running at 133 MHz (Samsung) and 143 to 183 MHz (Hyundai) transfer data on both clock edges, translating to 8.5 to 11.6 Gbps...

14/3,K/37 (Item 2 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

11988810 SUPPLIER NUMBER: 61533580 (USE FORMAT 7 OR 9 FOR FULL TEXT)
LCD controller with SRAM.
WILSON, RICHARD
Electronics Weekly, 41
Feb 9, 2000
ISSN: 0013-5224 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 83 LINE COUNT: 00009

TEXT:
The SED1375 from Epson is a colour or monochrome LCD graphics controller with an embedded 80kbyte SRAM **display buffer** . **Applications** include office automation equipment, mobile communications devices and palm size PCs. Features include hardware portrait mode and virtual and split screen. It is aimed at Windows CE **applications** but works with **other** CPUs and operating systems. Resolution is 640 x 480 at a colour depth of 2bits/pixel, 640 x 240 at 4bits/pixel or 320 x...

14/3,K/38 (Item 3 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
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10093742 SUPPLIER NUMBER: 20448768 (USE FORMAT 7 OR 9 FOR FULL TEXT)
ImageStation Stereo Softcopy Kit: Ground-breaking Price/Performance for Desktop Photogrammetry; Intergraph Brings Photogrammetric Capability to Standard PCs.
Business Wire, p3310161
March 31, 1998
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 521 LINE COUNT: 00051

... standard PC can run all ImageStation Z software modules.
Features available with the SSK include on-the-fly epipolar resampling, smooth stereo roam, display of **multiple** stereo windows and inline **software** JPEG compression/decompression. High-performance hardware components included in the kit are the Intense 3D Pro Open GL stereo **frame buffer** , 3D mouse and CrystalEyes stereo kit. The base system provides data management, stereo **display** and feature collection **software** . The Pro version adds orientation and DTM collection modules. Both SSK versions include a comprehensive one-year warranty and service contract. Both versions require Windows...

14/3,K/39 (Item 4 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
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08900655 SUPPLIER NUMBER: 18420739
Frame-buffer wars: new directions in PC graphics.
Kocsis, David
EDN, v41, n11, p121(5)
May 23, 1996
ISSN: 0012-7515 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 3289 LINE COUNT: 00275

... One is the subsystem benchmark, which, in the case of the graphics subsystem, theoretically tests the performance of just the graphics hardware, such as the **graphics** controller and **memory** , and **software** , the **display** driver. The **other** benchmark is an overall system benchmark, which exercises the entire system in the way a normal user would when running a set of common application...

14/3,K/40 (Item 5 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.

08199916 SUPPLIER NUMBER: 17487219 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Breathing new life into old apps. (Client/Server Technology Ltd's GUISys/400 Development Kit 2.11 and VBSys programming utilities) (Software Review) (Evaluation)
Hughey, Eric
InformationWeek, n547, p73(5)
Oct 2, 1995
DOCUMENT TYPE: Evaluation ISSN: 8750-6874 LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1888 LINE COUNT: 00157

... locally on their PCs. Then, when they run our application on the AS/400 host, they see our product on their PC looking like any **other** Windows **application** . They can navigate through the rejuvenated Mapics application just as they would through any **other** GUI2Dbased **application** . To use the .EXE file created by GUISys/400, our customers need only a 486 computer, 8 Mbytes of **RAM** , **SVGA video card** , and Windows 3.1 and 5250 terminal2Demulation **software** . Visual Basic **Screens** At Marcam, we also use Client/Server Technology's add2Don product, VBSys, which generates

Microsoft Visual Basic 3.0 forms. VBSys versions are available for...
...a graphical user interface for them. This means we can capitalize on the ease of use and ease of learning that users already experience with **other** GUI2Dbased **applications** . These features are no longer merely "nice to have"2Dthey're "must haves." Users don't want anything less. Eric Hughey is VP of development...

14/3,K/41 (Item 6 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.
>>>Accession number 8167806 is unavailable

14/3,K/42 (Item 7 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.

07497847 SUPPLIER NUMBER: 15687527 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Rendering-visualization software. (computer graphics)
Computer Pictures, v12, n4, p30(6)
July-August, 1994
ISSN: 0883-5683 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 5961 LINE COUNT: 00483

... incorporates Pixar's Photo-realistic Renderman to create photo-realistic images of AutoCAD 3D models on the PC, It supports a 16-bit, or greater, **framebuffer** for rendering and **dual - display** setups.
The **program** is coupled with AutoCAD to give 24-bit color support, "life-like" surface properties from a wide range of RenderMan shaders (modified or created) and...

14/3,K/43 (Item 8 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
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06808403 SUPPLIER NUMBER: 14832149 (USE FORMAT 7 OR 9 FOR FULL TEXT)
True multimedia for PCs.
Wilson, Richard
Electronics Weekly, n1660, p20(1)
Nov 17, 1993
ISSN: 0013-5224 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1121 LINE COUNT: 00086

... a poor 3 frames per second.
VideoLogic has developed, in partnership with IBM, 32-bit and 64-bit graphics corprocessors to sit along side video **RAM** and DRAM 86C928 **graphics controllers** to accelerate the **software** playback which will support full **screen** 640 x 480 pixel video at 30 frames per **second** . " **Software** video playback is almost like a graphics function," said VideoLogic's research director Hussein Yassaie.
The graphics accelerator, which VideoLogic calls its Powerplay chip, on...

14/3,K/44 (Item 9 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
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06512726 SUPPLIER NUMBER: 14739659 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Sigma Designs offers new multimedia board. (Product Announcement) (Brief Article)
Pemberton, Heather
CD-ROM News Extra, v1, n1, p6(1)
Feb, 1993
DOCUMENT TYPE: Brief Article LANGUAGE: ENGLISH RECORD TYPE:

FULLTEXT
WORD COUNT: 80 LINE COUNT: 00006

TEXT:
...perfromance SCSI CD-ROM, a standard IBM, joystick, full duplex MIDI, and internal 20-voice stereo synthesizer, as well as Sigma Designs' proprietary MultiMode Control **Panel** and **several** well-known multimedia **applications** . The WinStro, multimedia **display adapter** comes with 1MB of **memory** and is list priced at $429.

14/3,K/45 (Item 10 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
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06192500 SUPPLIER NUMBER: 13284794 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Weitek Power for Windows. (Evaluation)
Benford, Tom
Compute, v14, n7, p28(2)
August, 1992
DOCUMENT TYPE: Evaluation ISSN: 0194-357X LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 519 LINE COUNT: 00040

... s a fully functional and completely compatible VGA board. While video cards with 1MB of RAM are quite common, the Weitek board actually outperforms Super **VGA cards** with double the **RAM** , thanks to its dedicated W5086 User **Interface** Controller chip, even with DOS **applications** . Under Windows, the card typically runs **applications** from **two** to four times faster.
Installing the board consists of removing or disabling the present video card and replacing it with Power for Windows, connecting the...

14/3,K/46 (Item 11 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
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05865794 SUPPLIER NUMBER: 12195626 (USE FORMAT 7 OR 9 FOR FULL TEXT)
VIDTECH MICROSYSTEMS INTRODUCES WINMAX ADAPTER CARD FOR WINDOWS BUSINESS APPLICATIONS; INCREASES SPEED TO 7 TIMES
PR Newswire, 0601A5524
June 1, 1992
LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 657 LINE COUNT: 00054

... depending on configuration.
WinMax is designed to increase the on-screen performance of Windows business applications such as word processing and spreadsheets, as well as **other** Windows **applications** . Specifically, WinMax makes unfolding **menus** , repositioning windows and scrolling through pages five to seven times faster than dumb **frame - buffer** Super **VGA controllers** . This increased performance is achieved through the W5186 which incorporates Bit Block Transfer (BitBLT) and LineDraw functions in hardware to off-load the CPU.
"Windows...

14/3,K/47 (Item 12 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
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04567264 SUPPLIER NUMBER: 08355160 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Intel's 860 captures high-end graphics market: products from IBM, HP, DEC, Matrox, Truevision and others. (product announcement)
Microprocessor Report, v4, n7, p9(1)
April 18, 1990
DOCUMENT TYPE: product announcement ISSN: 0899-9341 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 857 LINE COUNT: 00065

... being promoted primarily as graphics products, they are really general-purpose computation accelerators; no graphics-specific hardware is included, and the boards require a separate **frame buffer** to drive the **display** .

Software support is the key to making such products useful. The first product to be available for the Truevision board is the CRYSTAL 3D rendering system, which is sold by Time Arts (Santa Rosa, CA) and, bundled with **other** utilities, by AT&T Graphics **Software** Labs (Indianopolis, IN). Rendering speed is claimed to typically be increased by about a factor of seven over a 20-MHz 386 system.

DEC Uses...

14/3,K/48 (Item 13 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

04107907 SUPPLIER NUMBER: 07953203 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Mini imaging. (includes new product information from various companies) (Special Advertising Section) (product announcement)
Photonics Spectra, v23, n9, p101(7)
Sept, 1989
DOCUMENT TYPE: product announcement ISSN: 0731-1230 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 2635 LINE COUNT: 00222

... display and processing.

The VSI-150/151-1K variable scan interface acquires 1024 x 1024 images at a maximum rate of 20-million pixels per **second** . Based on the **application** , the VSI-150/151-1K **interfaces** with high-resolution area arrays, line scan cameras and digital output devices.

The FB-150/151-1K **frame buffer** provides 4Mbytes of image storage organized as one 1024 x 1024 x 16-bit frame store and two 1024 x 1024 x 8-bit frame...

14/3,K/49 (Item 14 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

03865002 SUPPLIER NUMBER: 07354509 (USE FORMAT 7 OR 9 FOR FULL TEXT)
REX on CD-ROM. (Religion Index) (evaluation)
Stover, Mark
CD-ROM Librarian, v4, n2, p17(4)
Feb, 1989
DOCUMENT TYPE: evaluation ISSN: 0893-9934 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT
WORD COUNT: 3229 LINE COUNT: 00248

... FABS will sell you all the necessary hardware. For $2,295 plus shipping you will get an XT clone with a 30MB hard drive, 640K **RAM** , internal CD-ROM drive, Herculescompatible **graphics card** , amber monitor, thermal printer, and **other** nice accessories (including some **software**).

Software Considerations and Search Capabilities

The **software** , **screens** , user **interfaces** , and index design of REX (as well as the mastering of the disc) were all produced by Reteaco Inc. of Willowdale, Ontario. Reteaco's special search software, "FindIT," is incredibly fast when compared to **other** CD-ROM search **software** . Search results are consistently displayed (with no exceptions) in less than three seconds, even With complicated Boolean search strategies. Many other CD-ROM systems Will...

14/3,K/50 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

00979801 96-29194
Personal computers
Komando, Kim
Office Systems v12n1 PP: 46-49 Jan 1995
ISSN: 8750-3441 JRNL CODE: OFS
WORD COUNT: 1953

...TEXT: applications require an all-star to step in and make the slam dunk.

The microprocessor controls all of the components inside your computer such as **memory** , screen **displays** **video** **cards** , disk drives, printers, **software** programs and more. Each hardware and **software** component has **different** performance statistics. The main CPU chip, however, is the star player on a computer court, ever though it's smaller than a postage stamp. That...

14/3,K/51 (Item 2 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

00632083 92-47023
A Recipe For Cooking up the World Class Presenter's Platform
Currid, Cheryl
InfoWorld v14n33 PP: 94 Aug 17, 1992
ISSN: 0199-6649 JRNL CODE: IFW
WORD COUNT: 613

...ABSTRACT: operating environment since every mainstream software and hardware developer is supporting it. A minimum of a 486 twenty-five MHz CPU, 6-8 megabytes of **RAM** and a 256-color **VGA** **card** and monitor are recommended for a workstation to develop presentations. Microsoft's PowerPoint 3.0 for Windows is the recommended **software** . Its tools include **multiple** slide **viewing** and an internal spell checker. Selecting a single package and trying to standardize it is important because **multiple** presentation **software** packages do not interchange files easily. It is also recommended to provide at least one clip art library and a drawing package. Lotus' SmartPics for...

14/3,K/52 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext

01066027 CMP ACCESSION NUMBER: IWK19951002S0040
Breathing New Life Into Old Apps - GUISys puts a pretty face on AS/400 and mainframe applications-without rewrites (spotlight)
Eric Hughey
INFORMATIONWEEK, 1995, n 547, PG73
PUBLICATION DATE: 951002
JOURNAL CODE: IWK LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: OpenLabs
WORD COUNT: 1756

... locally on their PCs. Then, when they run our application on the AS/400 host, they see our product on their PC looking like any **other** Windows **application** . They can navigate through the rejuvenated Mapics application just as they would through any **other** **GUI** -based **application** .

To use the .EXE file created by GUISys/400, our customers need only a 486 computer, 8 Mbytes of **RAM** , **SVGA** **video** **card** , and Windows 3.1 and 5250 terminal-emulation **software** .

Visual Basic **Screens**

At Marcam, we also use Client/Server Technology's add-on product, VBSys, which generates Microsoft Visual Basic 3.0 forms. VBSys versions

are available...

14/3,K/53 (Item 2 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2003 CMP Media, LLC. All rts. reserv.

01015378 CMP ACCESSION NUMBER: EET19940627S0655
Mixing graphics and video poses design challenges
STEVE EDELSON ; CRAIG WILEY
ELECTRONIC ENGINEERING TIMES, 1994, n 803, 55
PUBLICATION DATE: 940627
JOURNAL CODE: EET LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: Design
WORD COUNT: 1517

... it and sends the frames across the I/O bus to the video card. On the graphics card, the video images are stored in the **frame buffer** along with any information being **displayed** (e.g., **other** Windows **applications**). Still frames are transferred to the **frame buffer** at the frame rate, ideally 30 frames/s. The entire contents of the frame buffer (video and background) are copied through the RAMDAC to refresh...

14/3,K/54 (Item 3 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
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00573010 CMP ACCESSION NUMBER: CRN19900618S0827
PERSONICS CORP. (NEW PRODUCTS)
COMPUTER RESELLER NEWS, 1990, n 373, 98
PUBLICATION DATE: 900618
JOURNAL CODE: CRN LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: SOF
WORD COUNT: 147

The upgrade includes support for **VGA video adapters** , a **memory** resident color changer that works within text and graphics **applications** , 20 additional **screen** fonts and support for an increased number of **software programs** .
Other features in Ultravision 2.0 include the ability to display more than the standard 80 25 characters usually available on a display. This enables users...

14/3,K/55 (Item 1 from file: 810)
DIALOG(R)File 810:Business Wire
(c) 1999 Business Wire . All rts. reserv.

0229928 BW616

QUADTEL CORP: Quadtel introduces new software to "improve memory" for MS-DOS and Windows users

June 11, 1991

Byline: Business Editors/Computer Writers

...much as 320KB of previously
unused memory, or shadow RAM, to provide Microsoft Windows users with
resources necessary for loading often-used TSRs and "drivers"
(**software** that **interfaces** with printers, **video display boards** , networks
etc.) into high **memory** . **Other programs** may use a substantial amount of
extended memory in order to provide high memory, and they may not

recover shadow RAM, resulting in less overall...

14/3,K/56 (Item 1 from file: 610)
DIALOG(R)File 610:Business Wire

00156850 19991214348B0394 (USE FORMAT 7 FOR FULLTEXT)
iGST Ships Industry's Most Advanced 3D Broadband Streaming Media Processor
Business Wire
Tuesday, December 14, 1999 13:29 EST
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
DOCUMENT TYPE: NEWSWIRE
WORD COUNT: 791

...e., legacy analog video, DVD, and VCR), the CyberPro 5300 can select one for video pass through (typically the full-screen image), which bypasses the **frame** buffer.

Hardware alpha blending (tView) lays the groundwork for transparency and advanced services like TVChat. Transparency enables consumers to **view** Internet web pages, **program** guides, interactive **menus** and **other** background services (such as TVChat) without obscuring the broadcast video. Unlike standard PIP, in which the picture window for the background image hides a portion...